ClientPOS

PT8000

User Manual

Version: 1.0

P/N :

Copyright

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Safety Instructions

1. Read these instructions carefully. Keep these instructions for future reference.
2. Please disconnect this equipment from AC outlet before cleaning. Don't use liquid or sprayed detergent for cleaning. Use moisture sheet or cloth for cleaning.
3. Please keep this equipment from humidity.
4. Lay this equipment on a reliable surface when install. A drop or fall could cause injury.
5. Make sure power cord such a way that people can not step on it. Do not place anything over the power cord.
6. All cautions and warnings on the equipment should be noted.
7. If the equipment is not used for long time, disconnect the equipment from main to avoid being damaged by transient over voltage.
8. Never pour any liquid into opening, this could cause fire or electrical shock.
9. If one of the following situations arises, get the equipment checked by a service personnel:
   a. The power cord or plug is damaged.
   b. Liquid has penetrated into the equipment.
   c. The equipment has been exposed to moisture.
   d. The equipment does not work well or you can not get it work according to **user manual.**
   e. The equipment has dropped and damaged.
10. Do not leave this equipment in an environment unconditioned, storage temperature below -20°C or above 60°C, it may damage the equipment.
11. Unplug the power cord when doing any service or adding optional kits.

Lithium Battery Caution:

Danger of explosion can happen if the battery is incorrectly replaced. Replace only the original or equivalent type recommended by the manufacture. Dispose used batteries according to the manufacture's instructions.

Do not remove the cover, and ensure no user serviceable components are inside. Take the unit to the service center for service and repair.

CE Notice

This device complies with the requirements of the CE directive.

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with emission limits.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

WEEE Notice

This appliance is labeled in accordance with European Directive 2002/96/EC concerning waste electrical and electronic equipment (WEEE). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

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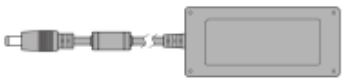
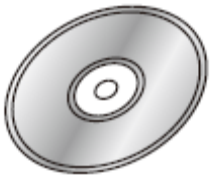
1 Packing List

1-1 Standard Accessories

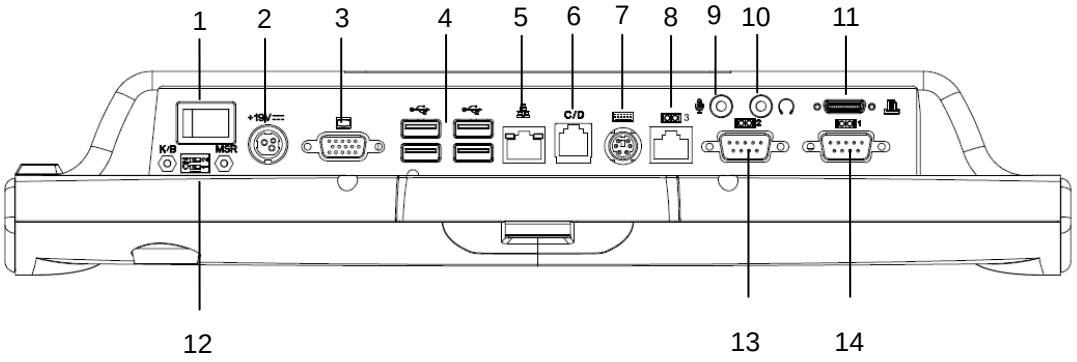
a.	b. 	c.
d. 	e.	a. System (with stand) b. Power Adapter c. Power Cord d. Driver Bank e. M3 Screw x2

1-2 Optional Accessories

a.	b.
c.	1. Single MSR 2. 3 IN 1 MSR 3. Screw x2

2 System View

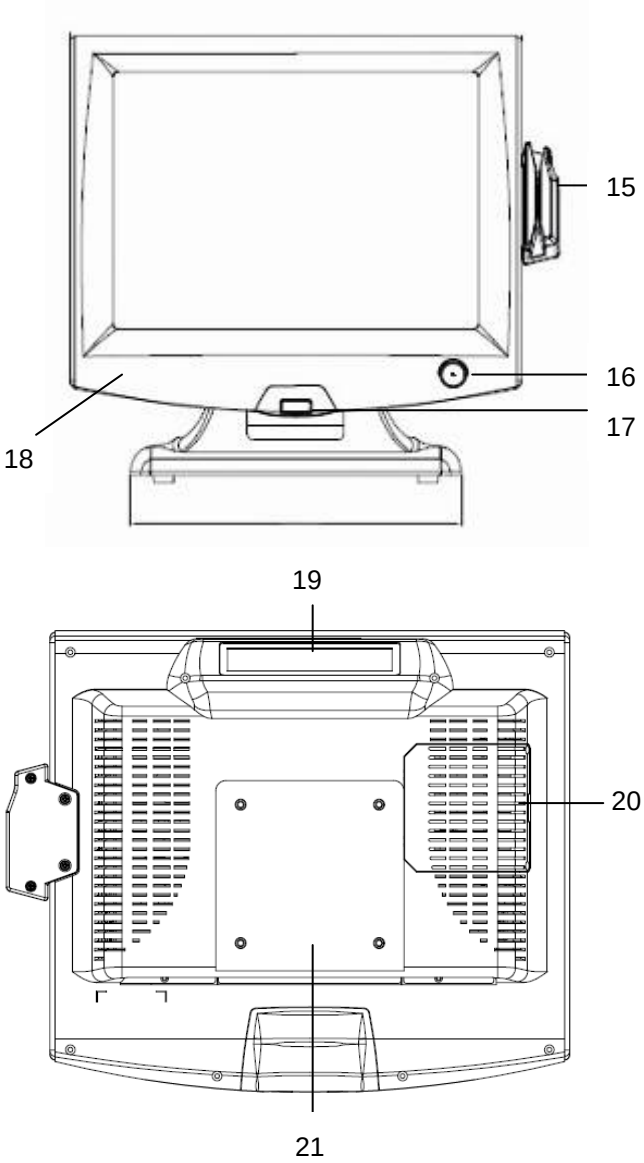
2-1 Rear View



Item

1. Power Switch
2. 19V DC-in lock connector
3. VGA
4. USB x4
5. RJ45(LAN)
6. RJ11 for cash drawer
7. PS/2
8. RJ45(COM3 for External VFD)
9. Mic-in
10. Line-out
11. LPT(Option)
12. PS/2 MSR Switch Gear(Option)
13. COM2
14. COM1
15. MSR(Option)
16. iButton(Option)
17. 1D/2D Barcode Scanner(Option)
18. RFID(Option)
19. LCM/VFD(Option)
20. HDD / CFast
21. VESA Mount

☆ Please make sure 19V DC plug in the right direction before plugging in DC jack.



2 System View

2-2 Specification

Processor	Intel Atom D2550 1.86GHZ
Chipsets: North Bridge/South Bridge	Intel NM10
Memory	SO-DIMM socket supports DDR3 up to 4GB
Audio	Line-out/Mic-in
Network	RJ45 10/100/1000 Base-T
USB	4*USB 2.0
Storage	CFast card / 2.5” SATA HDD / SSD
BIOS	AMI UEFI BIOS Support
Power	DC 19V 90/65W Adaptor
Thermal Solution	Fan-less
Dimension	37.54(W) x 37.23(H) x 26.89 (D) cm
Operating Temperature	0°C ~ 40°C
Storage Temperature	-20°C ~ 60°C
Storage Humidity	-20% ~ 80%, non-condensing

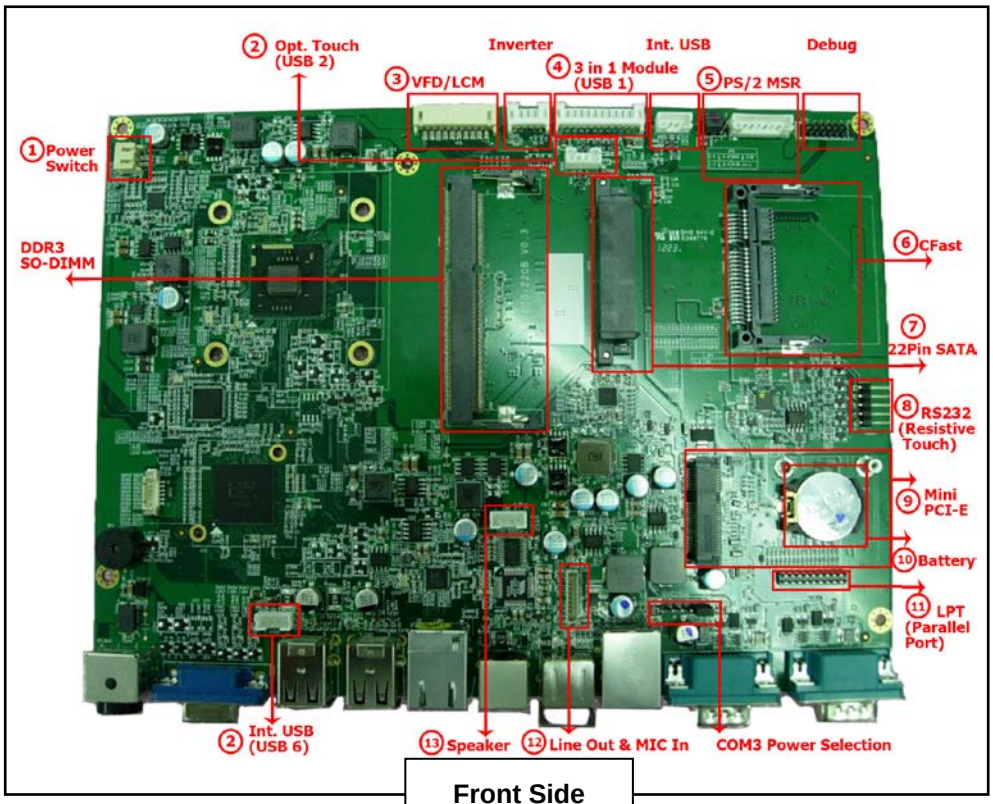
Display		
LCD Panel Size	15-inch TFT Active Matrix Display	
Resolution	1024*768 Pixels	
Backlight	LED	CCFL
Brightness	400 cd/m2	250 cd/m2
Touch Panel	5-Wire Analog Resistive Type	

Note:

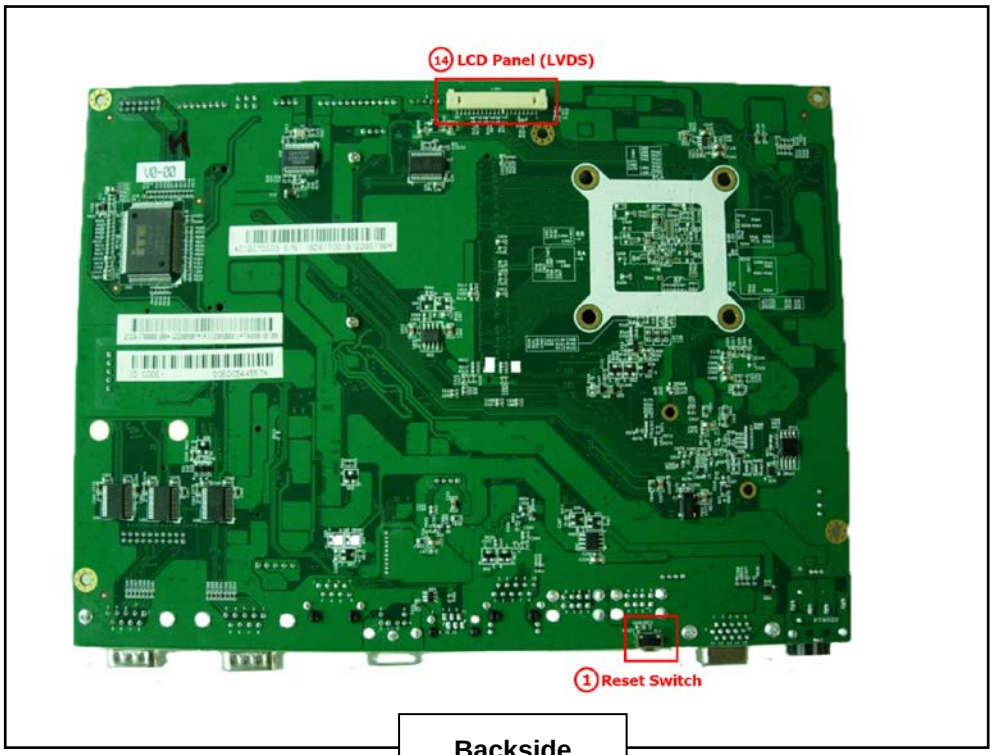
- Intel™ Cedarview CPU does not support 64-bit OS, therefore 64-bit Microsoft Windows® Embedded POSReady 7 and 64-bit Microsoft Windows® 7 are not supported on PT8000.
- Current Intel™ XP Pro / POSReady 2009 graphics driver for Cedarview platform does not support dual display.
- Please avoid excessive shock during HDD operating.

2 System View

2-3 Internal Layout



Front Side



Backside

3 Pin Definition

1. Power Switch (CN1)

Power switch (CN1)	
Pin	Signal
1	PWRBTN_N
2	GND

2. Internal connector fo USB6

Pin	Signal
1	5V
2	D-
3	D+
4	GND

☆ USB 6 is connected to one hub, and it is for iButton, RFID and barcode scanner.

3. VFD (COM4)

Pin	Signal	Pin	Signal
1	5V	6	CTS
2	DSR	7	TXD
3	Ground	8	RXD
4	DTR	9	Ground
5	RTS	10	12V

4. Internal connector for 3 in 1 module (USB 1)

Pin	Signal	Pin	Signal	Pin	Signal
1	5V	5	HUB_P1_DP	9	HUB_P3_DP
2	5V	6	HUB_P2_DN	10	GND
3	GND	7	HUB_P2_DP	11	3.3V
4	HUB_P1_DN	8	HUB_P3_DN	12	3.3V

5. PS/2 MSR (CN9)

Pin	Signal	Pin	Signal	Pin	Signal
1	5V	4	GND	7	K/B Clock
2	K/B Data	5	NC	8	MSR K/B Clock
3	MSR K/B Data	6	GND		

3 Pin Definition

Jumper setting JP2					
Pin	Signal	Pin	Signal	Pin	Signal
1	K/B Data	3	MSR K/B Data	5	NC
2	K/B Clock	4	MSR K/B Clock	6	NC

6. CFast connector

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	7	GND	13	NC	19	NC
2	TX	8	CDI	14	GND	20	V3.3
3	TX#	9	GND	15	NC	21	V3.3
4	GND	10	NC	16	NC	22	GND
5	RX#	11	NC	17	NC	23	GND
6	RX	12	NC	18	NC	24	CDO

7. 22Pin SATA connector

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	7	GND	13	GND	19	GND
2	TX	8	V3.3	14	V5	20	V12
3	TX#	9	V3.3	15	V5	21	V12
4	GND	10	V3.3	16	V5	22	V12
5	RX#	11	GND	17	GND		
6	RX	12	GND	18	ACT-/SPIN		

8. RS232 type COM(For Resistive Touch)

Pin	Signal
1	UR
2	LR
3	SG
4	UL
5	LL

3 Pin Definition

9. Mini PCI-E

Pin	Signal	Pin	Signal
1	Wake#	9	GND
2	+3.3V	10	RSVD
3	RSVD	11	REFCLK-
4	GND	12	RSVD
5	RSVD	13	REFCLK+
6	1.5V	14	RSVD
7	CLKREQ#	15	GND
8	RSVD	16	RSVD

Key			
Pin	Signal	Pin	Signal
17	RSVD	35	GND
18	GND	36	USB D-
19	RSVD	37	RSVD
20	W_Disable#	38	USB D+
21	GND	39	RSVD
22	PERST#	40	GND
23	PER_ND	41	RSVD
24	+3.3V_AUX	42	LED_WWAN#
25	PER_PD	43	RSVD
26	GND	44	LED_WLAN#
27	GND	45	RSVD
28	1.5V	46	LED_WPAN#
29	GND	47	RSVD
30	SMB_CLK	48	1.5V
31	PET_ND	49	RSVD
32	SMB_DATA	50	GND
33	PET_PD	51	RSVD
34	GND	52	3.3V

10. Battery

Pin	Signal	Pin	Signal
1	VRTC	2	GND

11. LPT (J7)

Pin	Signal	Pin	Signal	Pin	Signal
1	STB#	8	SLIN#	15	PD6
2	AFD#	9	PD3	16	GND
3	PD0	10	BUSY	17	PD7
4	ERR#	11	PD4	18	GND
5	PD1	12	PE	19	ACK#
6	INIT#	13	PD5	20	GND
7	PD2	14	SLCT		

3 Pin Definition

12. Line Out & Mic In (Audio CN8)

Pin	Signal	Pin	Signal
1	GND	6	Line_Out L
2	MIC_Th_L	7	AMP-L
3	MIC_Th_R	8	AMP-R
4	GND	9	Line_Out R
5	GND	10	GND

13. Speaker (CN5)

Pin	Signal
1	L+
2	L-
3	R+
4	R-

14. LCD Panel (LVDS)

LVDS connector			
Pin	Signal	Pin	Signal
1	GND	11	GND
2	GND	12	LVDS_TX1_DP
3	NC	13	LVDS_TX1_DN
4	NC	14	GND
5	GND	15	LVDS_TX0_DP
6	LVDS_CLK_DP	16	LVDS_TX0_DN
7	LVDS_CLK_DN	17	GND
8	GND	18	GND
9	LVDS_TX2_DP	19	LCD_VDD
10	LVDS_TX2_DN	20	LCD_VDD

Back light(Inverter)	
Pin	Signal
1	12V
2	Ground
3	No connect
4	Back light control
5	Back light enable

4 Rear I/O Interface

1. COM Port

Pin	Signal	Pin	Signal	Pin	Signal
1	DCD	4	DTR	7	RTS
2	RXD	5	Ground	8	CTS
3	TXD	6	DSR	9	5V/12V/Ring
**COM1 and COM2 Pin9 function selection by BIOS Item					

2. Cash Drawer(COM 6)

Pin	Signal	Pin	Signal	Pin	Signal
1	Ground	3	Open/close detection switch on drawer	5	NC
2	Drawer kick-out driver signal	4	+12VDC for drawer kick-out supplied	6	Ground

Example DOS COMMAND for **Cash Drawer**:
1. Create **the file**: TEST.TXT
2. Input below **contents** in TEST.TXT
CONTEXT-"000.0"
MODE COM6:300
3. Run COMMAND under DOS mode
COPY TEST.TXT COM6

3. VGA

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	Red	5	GND	9	5V	13	HSYNC
2	Green	6	GND	10	GND	14	VSYNC
3	Blue	7	GND	11	NC	15	DDC_CLK
4	NC	8	GND	12	DDC_DAT		

4. PS/2

Pin	Signal	Pin	Signal
1	K/B Data	4	VCC
2	Mouse Data	5	K/B Clock
3	GND	6	Mouse Clock

5. DC Jack

Pin	Signal
1	19V
2	GND
3	19V

6. 2 layer USB Port

Pin	Signal	Pin	Signal
1	5V	3	D+
2	D-	4	GND

4 Rear I/O Interface

7. Giga LAN

Pin	Signal	Pin	Signal	Pin	Signal
1	VCC	6	MDI2+	L1	LED1(Green +, Orange -)
2	MDI0+	7	MDI2-	L2	LED1(Green -, Orange +)
3	MDI0-	8	MDI3+	L3	LED2(Yellow +)
4	MDI1+	9	MDI3-	L4	LED2(Yellow -)
5	MDI1-	10	GND		

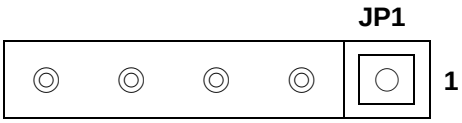
** LED1 : Link signal ** LED2 : Action signal

8. RJ45 type COM3

Pin	Signal	Pin	Signal
1	5V/12V	5	RTS
2	DSR	6	CTS
3	Ground	7	TXD
4	DTR	8	RXD

5V/12V Jumper selection (JP1)	
Pin	Signal
1	5V
2	NRI#A
3	NC
4	NRI#A
5	12V

Jumper for COM3 Voltage setting



	JP1
1-2	5V
4-5	12V

NOTICE:

☆ **COM 3 port. Warning!! COM3 (RJ45 Connector) for external VFD use only. Never use on network device. If you are using on the network device will cause the device damaged.**

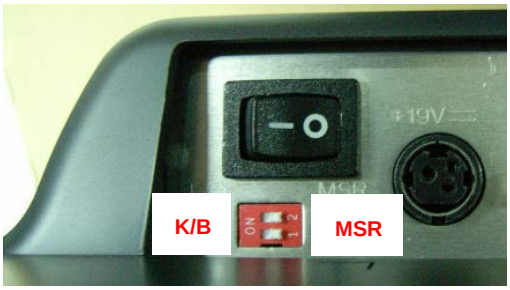
☆☆ **COM 3 port will be inactive if POS has internal VFD. (Alternative of COM 3 or internal VFD)**

9. PS/2 MSR Switch

☆ **Sliding both buttons toward the same side.**

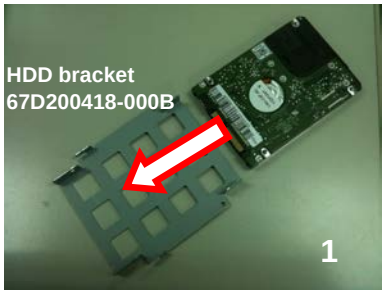
	ON	12
Only K/B	V	X
Only MSR	X	V
K/B + MSR	X	V

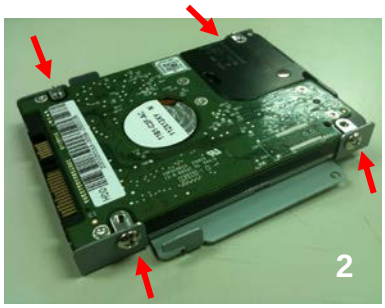
V : Function
X: Forbidden

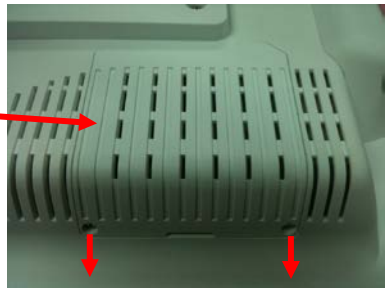


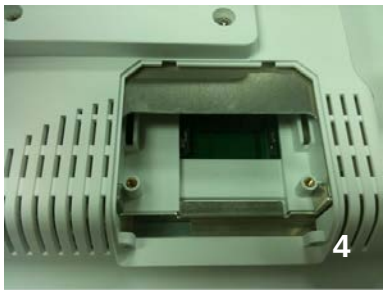
5 System Assembly & Disassembly

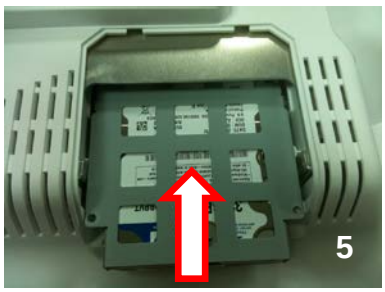
5-1 HDD







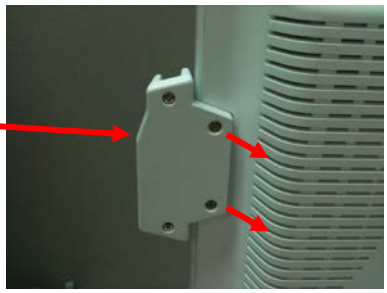


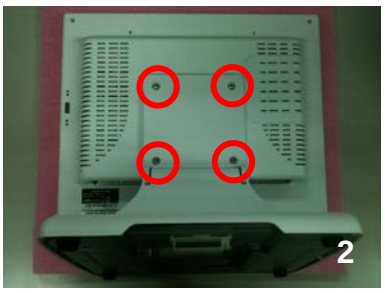


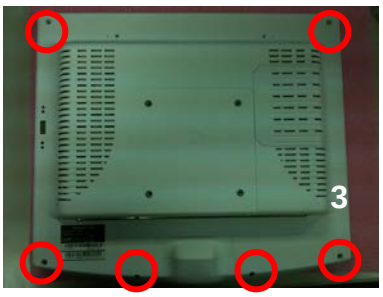
1. Put the HDD on the HDD bracket (67D200418-000B)
2. Fasten the 4 M3 screws (64D030044-100B)
3. Unscrew 2 M3 screws (64D030060-200T)
4. Unscrew the HDD cover
5. Fabricate HDD W/bracket in HDD holder
6. Fasten the 2 M3 screws (64D030044-100B)
7. Fasten the 2 M3 screws

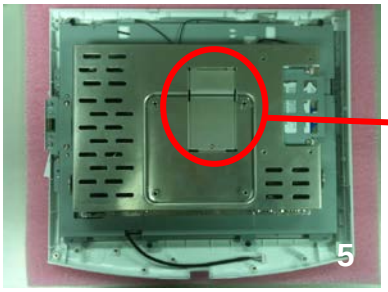
5 System Assembly & Disassembly

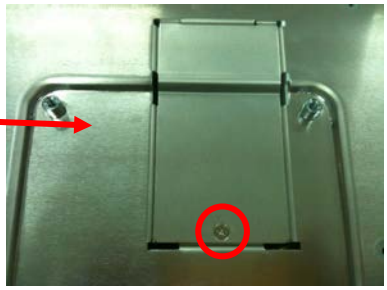
5-2 RAM







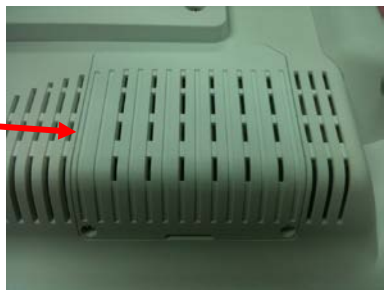




1. Unscrew 2 M3 screws (64DA30104-100B) and remove MSR
2. Unscrew 4 M4 screws (64D040081-100B) and remove the stand.
3. Unscrew 6 M4 screws (64D030060-200T) and remove the panel back
4. Remove the scanner cable
5. Unscrew 1 M3 screws (64D730041-100B)
6. Remove RAM door and install the RAM
7. Put the RAM door back.

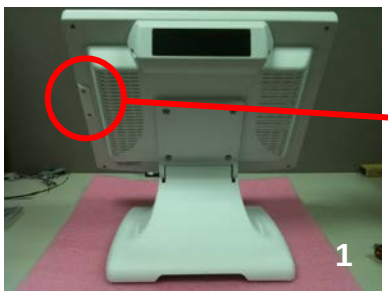
5 System Assembly & Disassembly

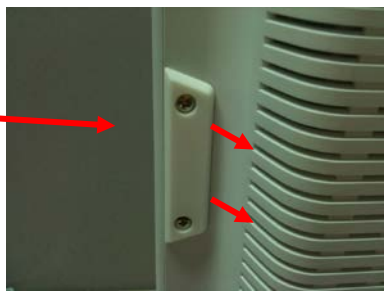
5-3 CFAST

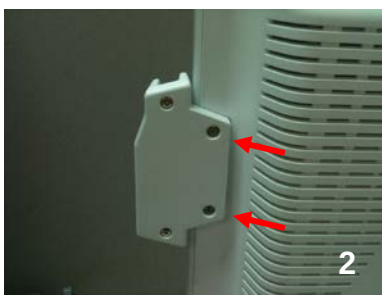


1. Unscrew 2 M3 screws (64D030060-200T) and remove the HDD cover
2. Insert CFAST card
3. Reinstall the HDD cover and secure it with screws

5-4 MSR



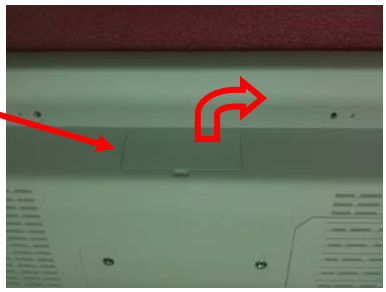




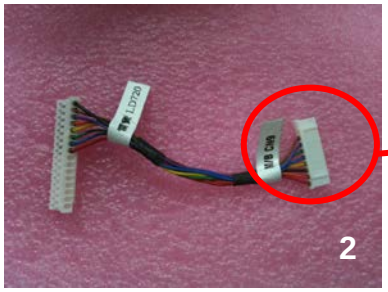
1. Unscrew 2 M3 screws (64D030060-200T)
2. Install MSR with screws.

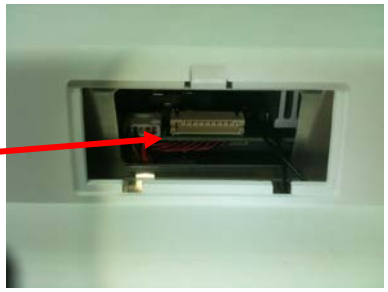
5 System Assembly & Disassembly

5-5 VFD



1. Remove VFD door(68D640000-000B)
2. Plug M/B side of VFD cable (35D510528-000B) into the motherboard

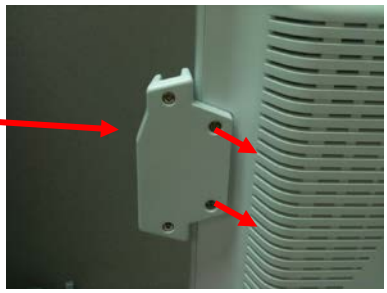


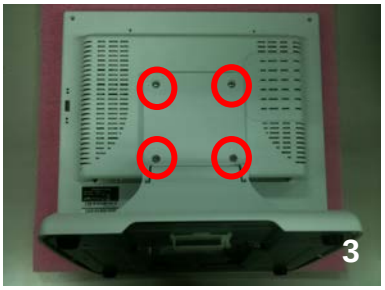


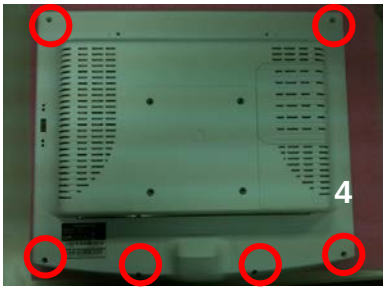
3. Plug the VFD cable (35D510528-000B) into the VFD device
4. Install VFD with screws.

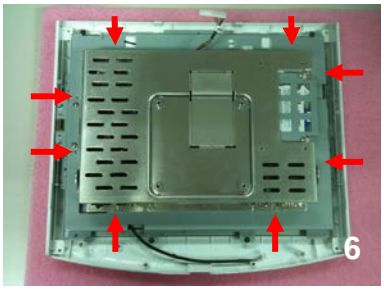
5 System Assembly & Disassembly

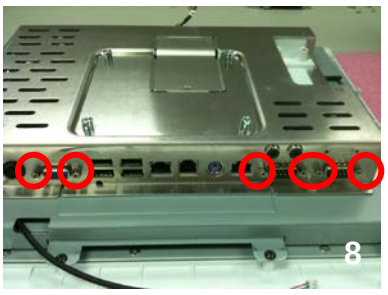
5-6 WLAN





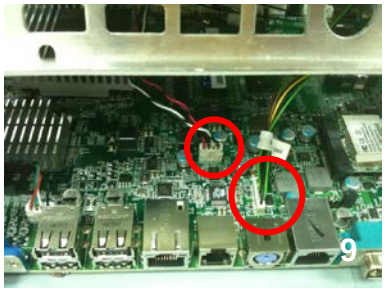


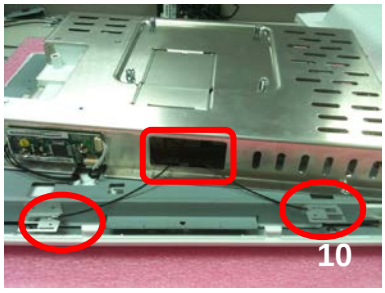


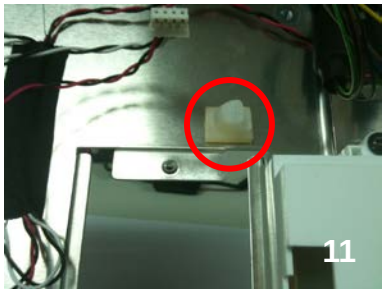


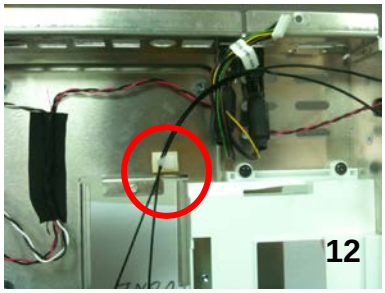
1. Unscrew 2 M3 screws (64DA30104-100B) and remove MSR
2. unscrew 2 M3 screws (64D030060-200T) and remove the VFD cable from the VFD module
3. Unscrew 4 M4 screws (64D040081-100B) and remove the stand.
4. Unscrew 6 M3 screws (64D030060-200T) and remove the panel back
5. Disconnect the scanner cable
6. Unscrew 8 M3 screws (64D730041-100B)
7. Unscrew 2 M3 screws (64D730041-100B) and remove the HDD with bracket
8. Unscrew 6 screws (64D730041-100B) and remove the shield cover

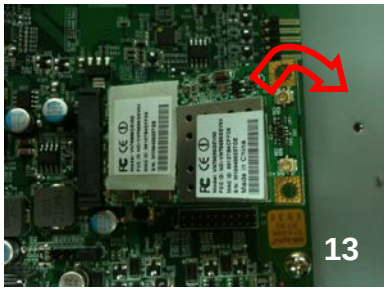
5 System Assembly & Disassembly

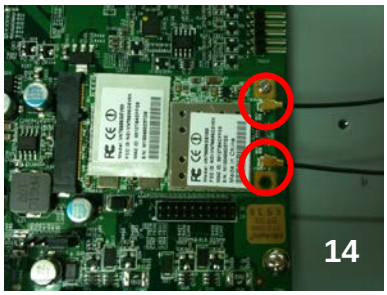










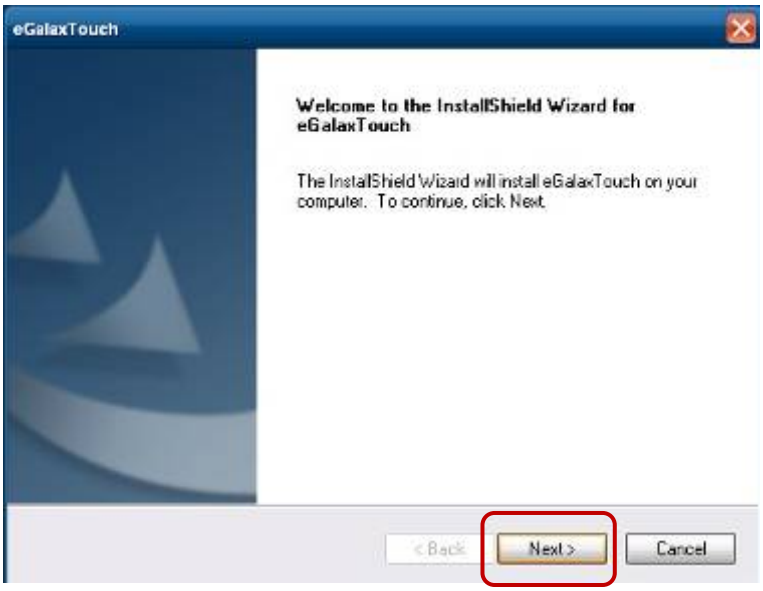


9. Disconnect the 2 cable
10. Adhere 2 pcs of aerials (35D510576-000B) through the red window
11. Adhere the cable clip
12. Arrange wires and adhere them on the cable clip
13. Combine the WLAN card and secure it with 1 M2 screw (64D920051-100B)
14. Connect 2 wires.

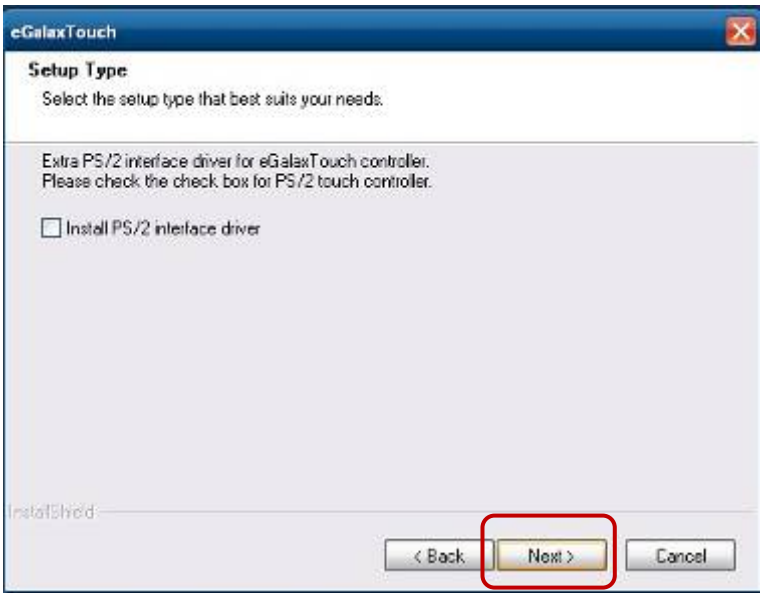
6 Device Driver Installation

6-1 Resistive Type Touch Panel

1. Click "**Next**".

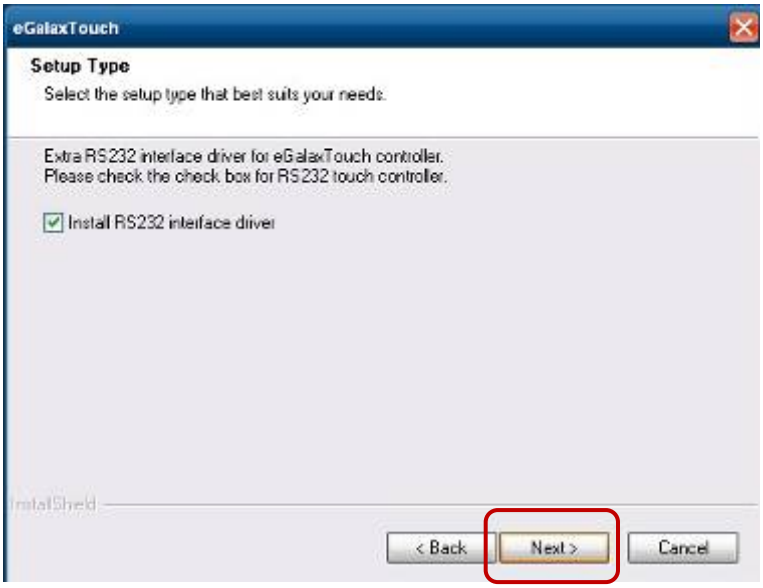

eGalaxTouch
Welcome to the InstallShield Wizard for eGalaxTouch
The InstallShield Wizard will install eGalaxTouch on your computer. To continue, click Next.
< Back
Next >
Cancel

2. Click "**Next**".

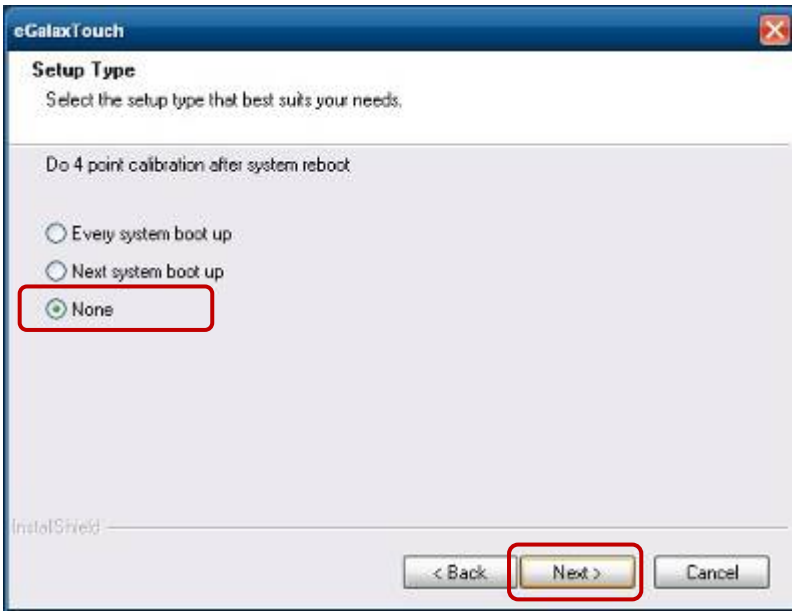

eGalaxTouch
Setup Type
Select the setup type that best suits your needs.
Extra PS/2 interface driver for eGalaxTouch controller.
Please check the check box for PS/2 touch controller.
Install PS/2 interface driver
InstallShield
< Back
Next >
Cancel

6 Device Driver Installation

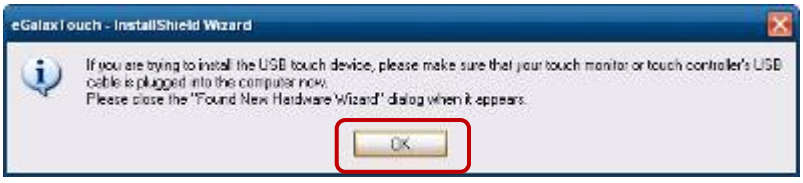
3. Click “**Next**”.


eGalaxTouch
Setup Type
Select the setup type that best suits your needs.
Extra RS232 interface driver for eGalaxTouch controller.
Please check the check box for RS232 touch controller.
Install RS232 interface driver
InstallShield
< Back
Next >
Cancel

4. Select “**None**”, Click “**Next**”.

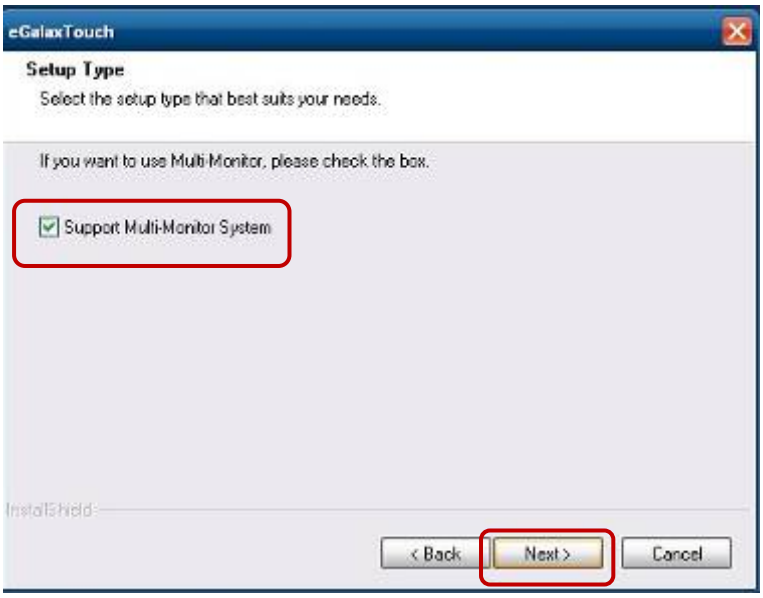


5 Click “**OK**”.

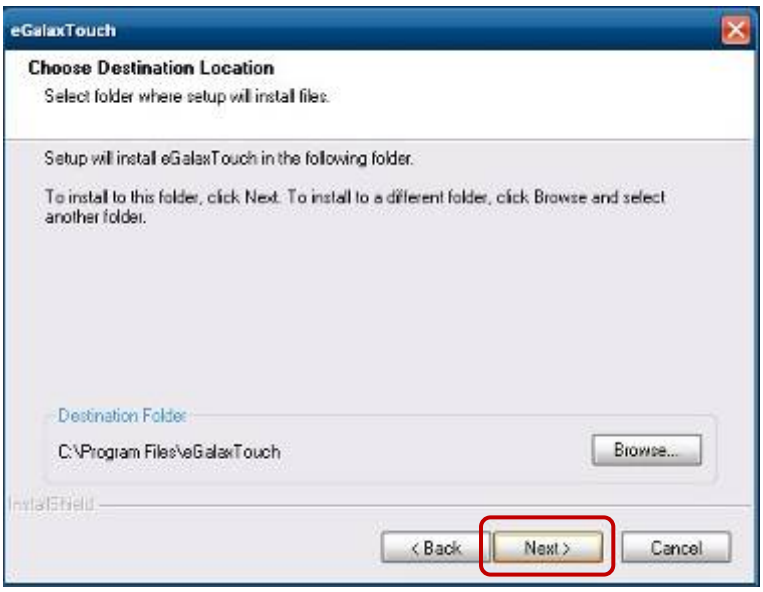

eGalaxTouch - InstallShield Wizard
If you are trying to install the USB touch device, please make sure that your touch monitor or touch controller's USB cable is plugged into the computer now.
Please close the "Found New Hardware Wizard" dialog when it appears.
OK

6 Device Driver Installation

6. Select "**Support Multi-Monitor System**", Click "**Next**".

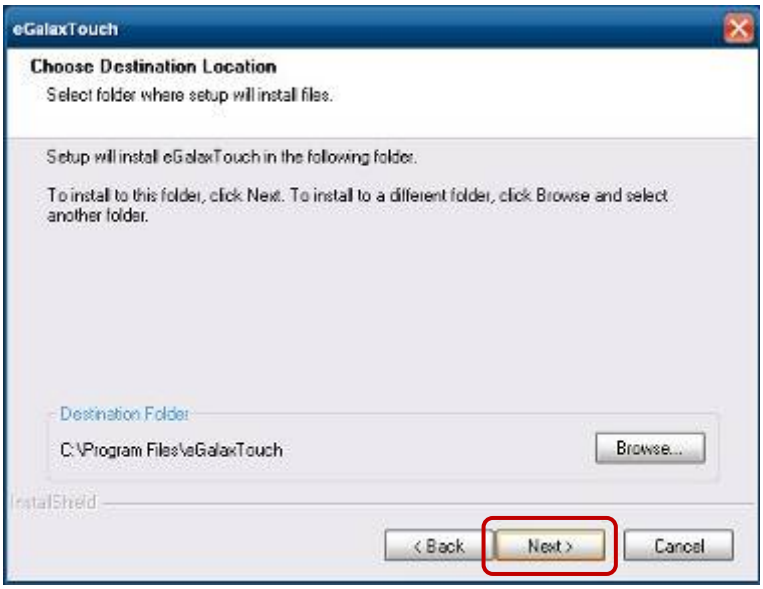


7. Click "**Next**".


eGalaxTouch
Choose Destination Location
Select folder where setup will install files.
Setup will install eGalaxTouch in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\eGalaxTouch
Browse...
InstallShield
< Back
Next >
Cancel

6 Device Driver Installation

8. Click "**Next**".

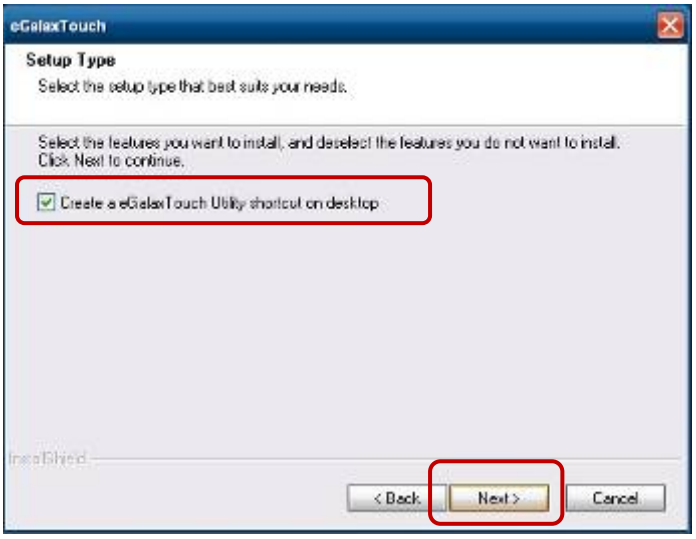

eGalaxTouch
Choose Destination Location
Select folder where setup will install files.
Setup will install eGalaxTouch in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\eGalaxTouch
Browse...
InstallShield
< Back
Next >
Cancel

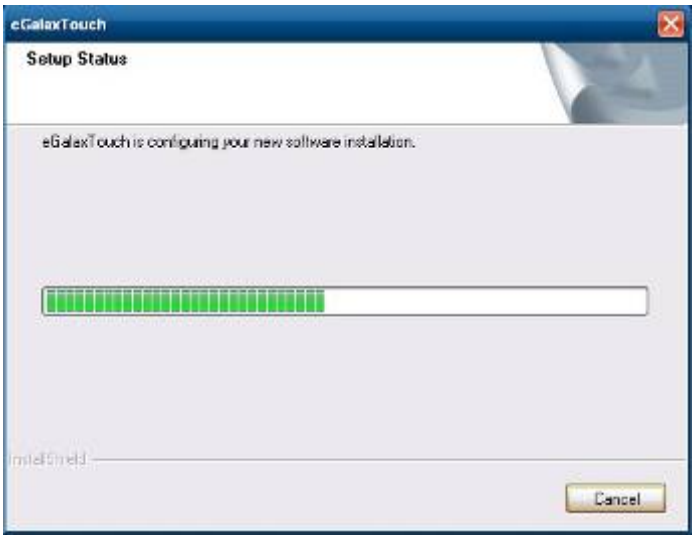
9. Click "**Next**".

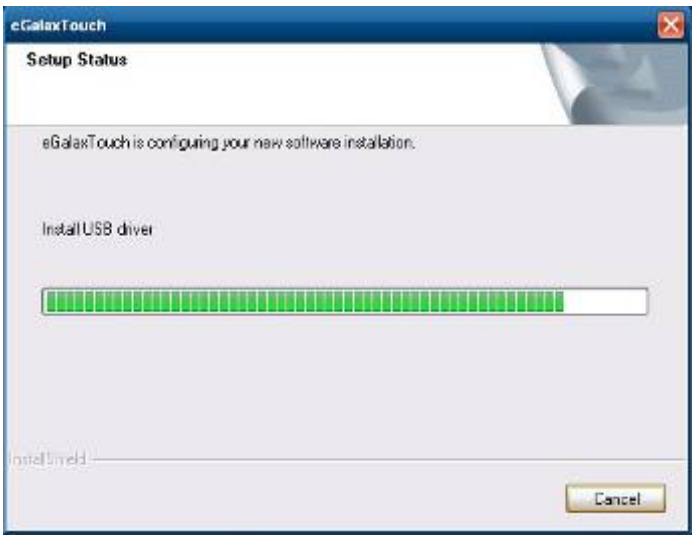
eGalaxTouch
Select Program Folder
Please select a program folder.
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing folders list. Click Next to continue.
Program Folder:
eGalaxTouch
Existing Folders:
Accessories
Administrative Tools
Startup
InstallShield
< Back
Next >
Cancel

6 Device Driver Installation

10. Select "**Create a eGalaxTouch Utility shortcut on desktop**", Click "**Next**".

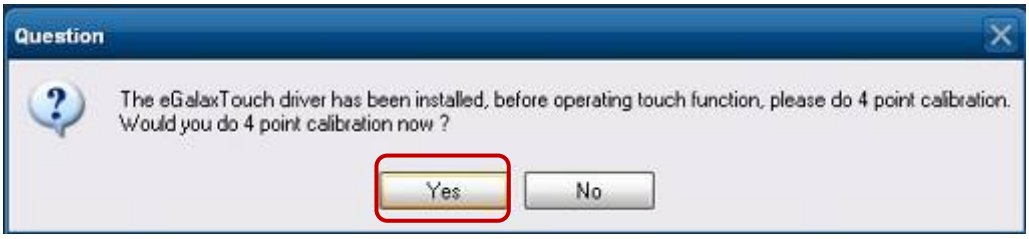

eGalaxTouch
Setup Type
Select the setup type that best suits your needs.
Select the features you want to install, and deselect the features you do not want to install. Click Next to continue.
Create a eGalaxTouch Utility shortcut on desktop
InstallShield
< Back
Next >
Cancel



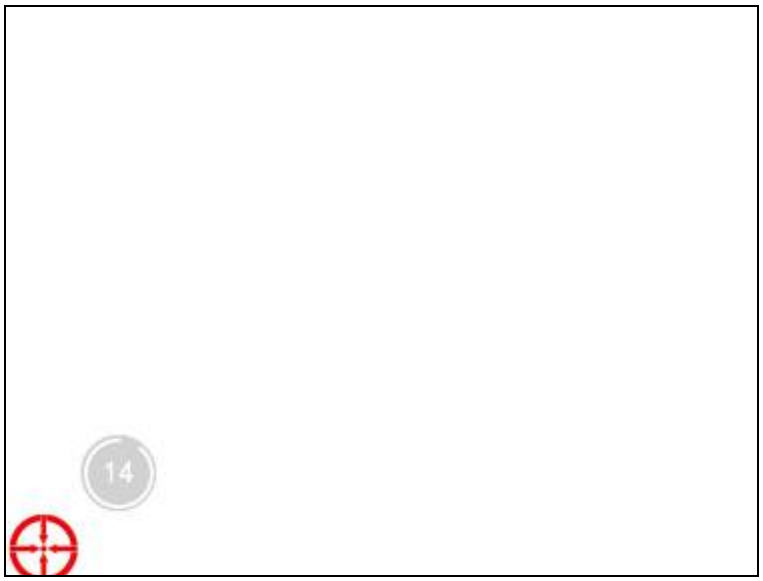


6 Device Driver Installation

11. Would you do 4 point calibration now? Click "**Yes**".


Question
The eGalaxTouch driver has been installed, before operating touch function, please do 4 point calibration.
Would you do 4 point calibration now ?
Yes
No

12. Do 4 points aligrment to match display.



13. Calibration utility.

6 Device Driver Installation

6-2 MagStripe Card Reader Configuration Utility

The MagStripe Card Reader Configuration Utility is used to set up the output format of HID MSR

Installation

Below steps guide you how to install the Utility program

- Insert the setup CD
- Run the **HID_MSR_PSW00003_V2_0_0.exe** setup file that is located in the Software folder of CD.
- Follow the wizard to complete the installation.

Launching Program

Below steps guide you how to load the **Utility** program.

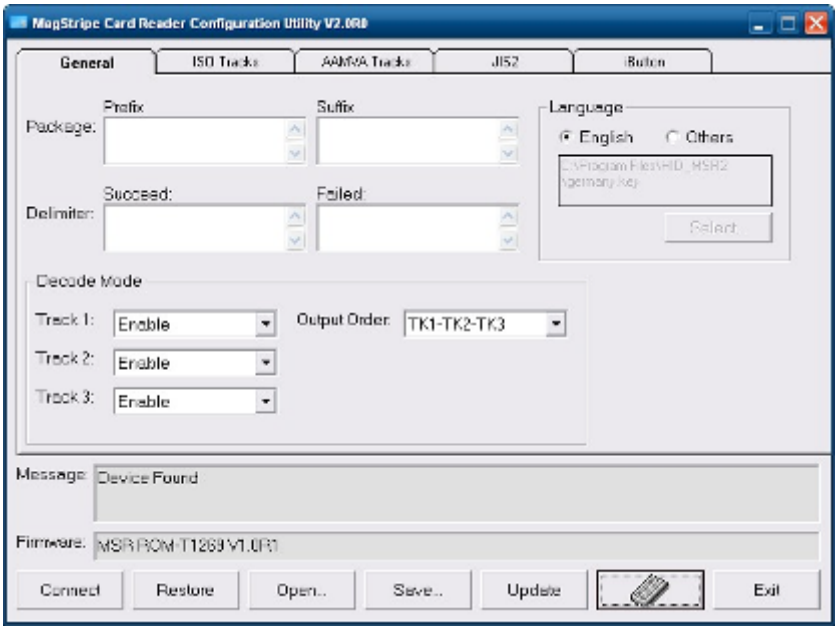
- From **Start/Programs**, click **HID_MSR2** folder
- Click **MagStripe Card Reader Configuration Utility** to launch the program.

6 Device Driver Installation

- The utility program will detect the connected reader. If detected, all the input text boxes will be enabled.
- If the reader has not been connected to PC yet, please connect the reader and then click **Refresh** to get connected.

Configuration

Below is the main window of **Utility** program.



For the settings, there are:

- **Language**: The language defines the code positions of the keyboard. Each language should use its own settings. Wrong language selected will cause the wrong character displayed.
- **Prefix/Suffix:** Defines the data string which you would like to append in front or end of the MSR data string.
- **Error Message:** Indicates which track number cause the error.
- **Delimiter**: Indicates the swipe result.

6 Device Driver Installation

- **ISO:** Define start and end sentinel character.
- **Decode Mode:** Determines the way of outputting the three tracks data.

Shown below is the data structure of the output string for MSR.

PP PR1 SS1 **TK1** ES1 SU1 PR2 SS2 **TK2** ES2 SU2 PR3 SS3 **TK3** ES3 SU3 SU DM

- **PP:** Prefix for package.
- **PR1:** Prefix for track 1.
- **SS1:** Start sentinel for track 1.
- **TK1:** Data for track 1, if error happens, using Error Message instead.
- **ES1:** End sentinel for track 1.
- **SU1:** Suffix for track 1.
- **PR2:** Prefix for track 2.
- **SS2:** Start sentinel for track 2.
- **TK2:** Data for track 2, if error happens, using Error Message instead.
- **ES2:** End sentinel for track 2.
- **SU2:** Suffix for track 2.
- **PR3:** Prefix for track 3.
- **SS3:** Start sentinel for track 3.
- **TK3:** Data for track 3, if error happens, using Error Message instead..
- **ES3:** End sentinel for track 3.
- **SU3:** Suffix for track 3.
- **SU:** Suffix for package.
- **DM:** Delimiter for the swipe result.

Prefix/Suffix

In default, the prefix and suffix settings are all keep blank. There are 4 kinds of prefix and suffix to be defined, which are:

- **Package:** For the prefix string, it is appended in the front of the whole MSR data. For the suffix, it is appended in the end of the whole MSR data. In most case, the suffix for package is always to be the “Enter” or “Tab” character. The max data length of the prefix and suffix for the

package can be up to 127.

- **TK1:** For the prefix string, it is appended in the front of the start sentinel of track 2. For the suffix, it is appended in the end of the end sentinel of track 2. The max data length of the prefix and suffix for the TK1 can be up to 127.
- **TK2:** For the prefix string, it is appended in the front of the start sentinel of track 2. For the suffix, it is appended in the end of the end sentinel of track 2. The max data length of the prefix and suffix for the TK1 can be up to 127.
- **TK3:** For the prefix string, it is appended in the front of the start sentinel of track 3. For the suffix, it is appended in the end of the end sentinel of track 3. The max data length of the prefix and suffix for the TK1 can be up to 127.

ISO

This group defines the start and end sentinel for each track. The sentinel is always used to extract the track data from the whole MSR data string. The data length for each sentinel is fixed to one character. Because there is ISO standard that defining the start and end sentinel for the three tracks. For the compatible reason, please do not modify the default value if possible.

Decode Mode

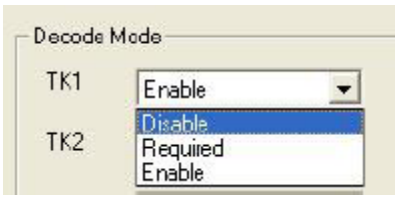
For this group, it contains two kinds of settings, which are:

- Track Data Filtering: Determine which track to be, not to be output or needed to be output.
- Switch Output Order: Change the output order of track 1 ~ 3.

6 Device Driver Installation

Track Data Filtering

Shown below is the filter setting for track 1. This provides a fool-proofing method in case of receiving unwanted or uncompleted track data.

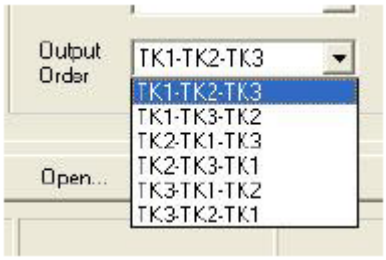


These three filter settings are:

- **Enable:** If selected, the data of specified track will be packaged in the MSR data string. If the specified track data is not decoded, it will leave blank in the MSR data string.
- **Required:** If selected, which means the output MSR data string must contain the specified track data. If the specified track data is not decoded, even MSR data string contains other track data, it will still not to be output.
- **Disable:** If selected, the data of specified track will not be packaged in the MSR data string. No matter it is decoded or not.

Switch Output Order

Show below is the selection of the three track data output order (sequence). The default order is Track 1–Track 2–Track 3.



6 Device Driver Installation

There 6 orders allow to be selected. Please select one to fit your application needs.

Update Settings

Once complete the settings, click **Update** to update the settings to connected HID MSR reader.

Save Settings

To save the settings to a file, click **Save**; specify the file name and location to be saved.

Open Settings

To load pre-saved settings, click **Open**, specify the settings file, and then click OK to load into program.

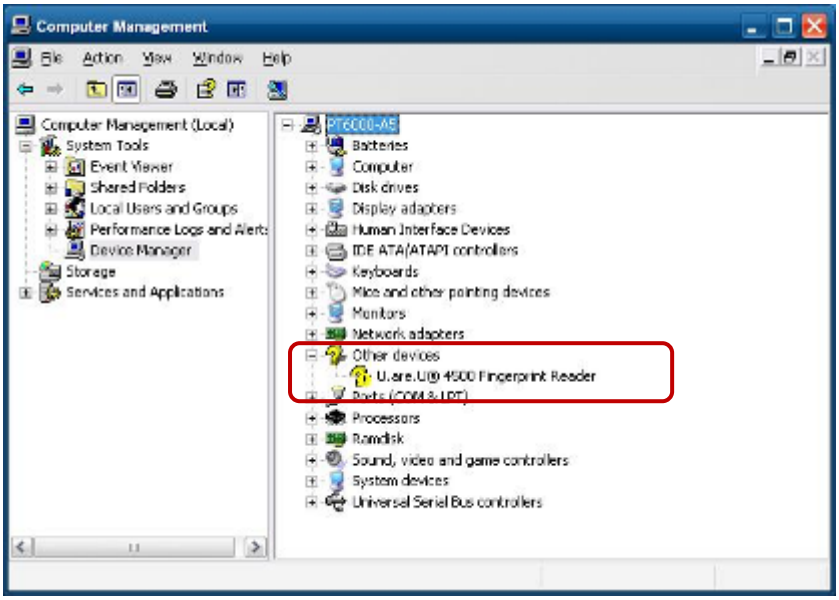
Restore MSR Reader Settings

To load restore settings of connected MSR reader, click **Restore ES2:** End sentinel for track.

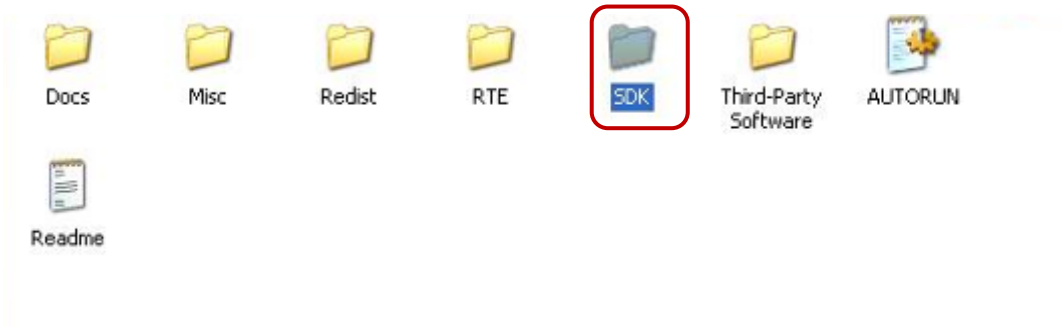
6 Device Driver Installation

6-3 Fingerprint Reader

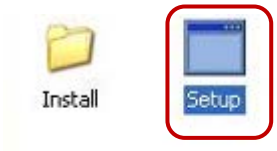
1. Check Fingerprint reader be detected by “Device manager “



2. Select SDK folder.

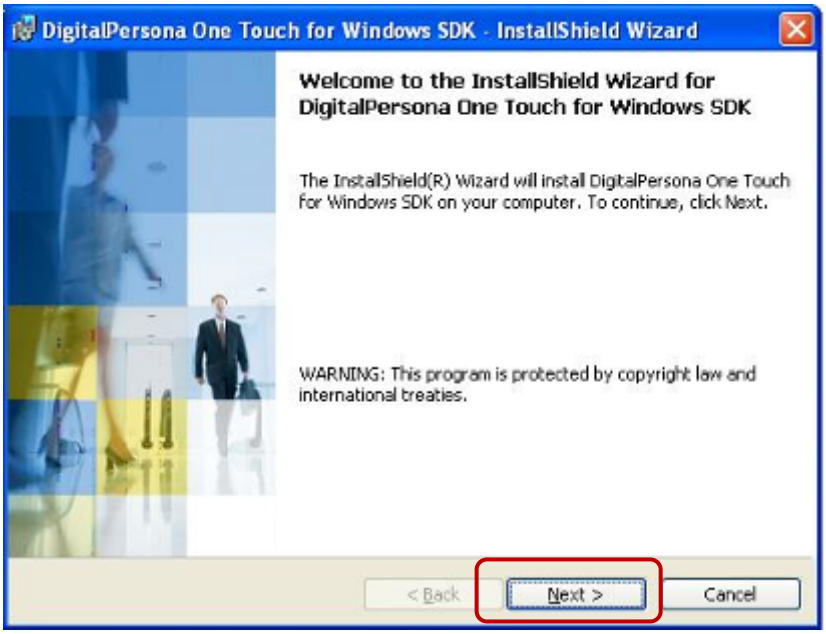


3. Run Setup.exe.

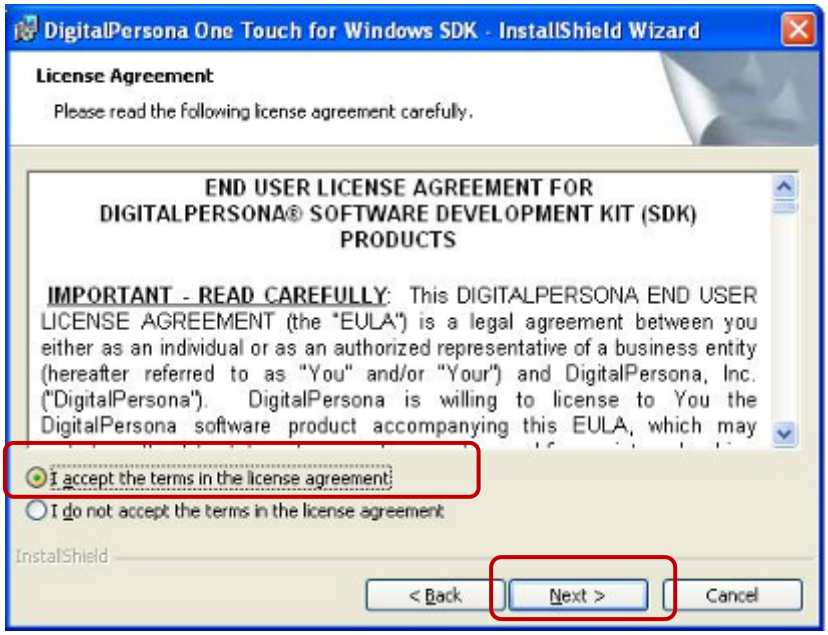


6 Device Driver Installation

4.Click “**Next**”.

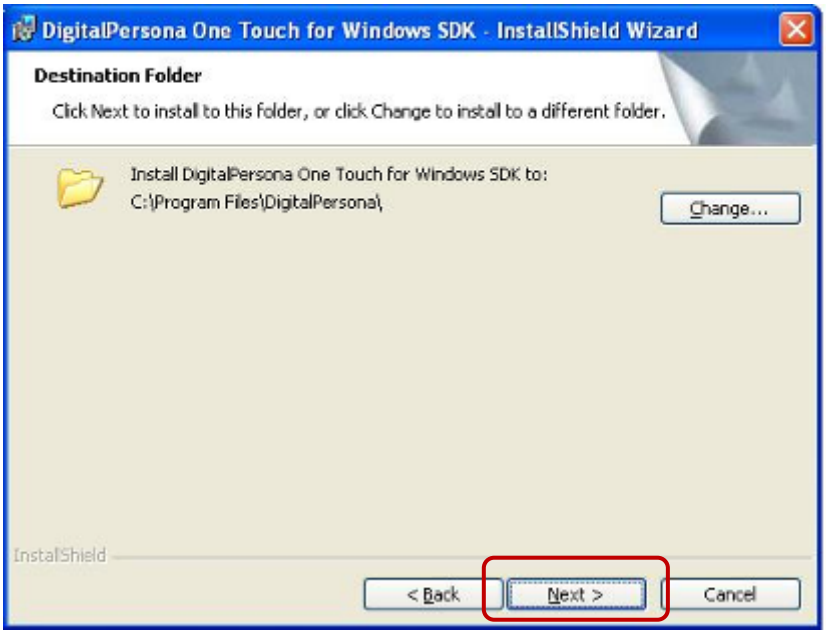

DigitalPersona One Touch for Windows SDK - InstallShield Wizard
Welcome to the InstallShield Wizard for DigitalPersona One Touch for Windows SDK
The InstallShield(R) Wizard will install DigitalPersona One Touch for Windows SDK on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel

5. Select “ **I accept the terms in the license agreement**” and click “**Next**”.

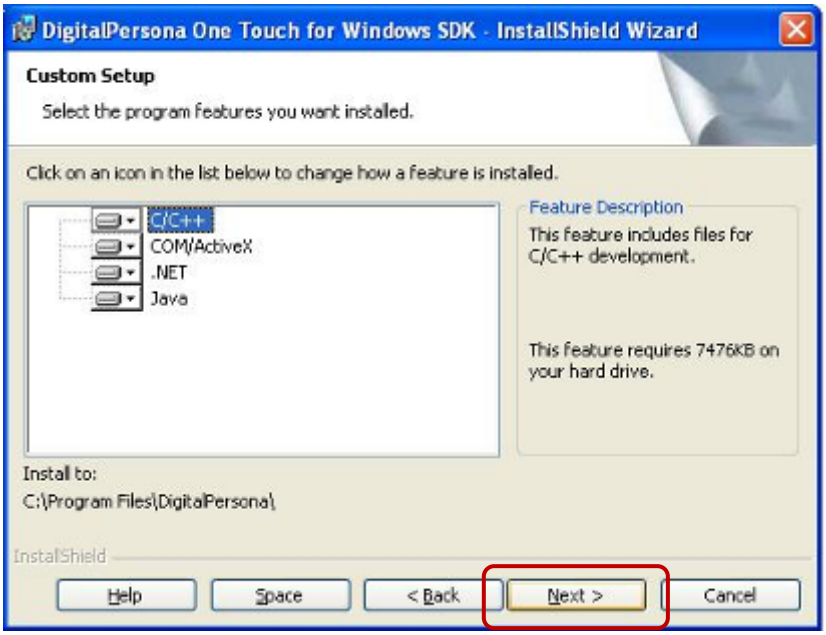

DigitalPersona One Touch for Windows SDK - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
END USER LICENSE AGREEMENT FOR DIGITALPERSONA® SOFTWARE DEVELOPMENT KIT (SDK) PRODUCTS
IMPORTANT - READ CAREFULLY: This DIGITALPERSONA END USER LICENSE AGREEMENT (the "EULA") is a legal agreement between you either as an individual or as an authorized representative of a business entity (hereafter referred to as "You" and/or "Your") and DigitalPersona, Inc. ("DigitalPersona"). DigitalPersona is willing to license to You the DigitalPersona software product accompanying this EULA, which may
I accept the terms in the license agreement
I do not accept the terms in the license agreement
InstallShield
< Back
Next >
Cancel

6 Device Driver Installation

6. Click “**Next**”.

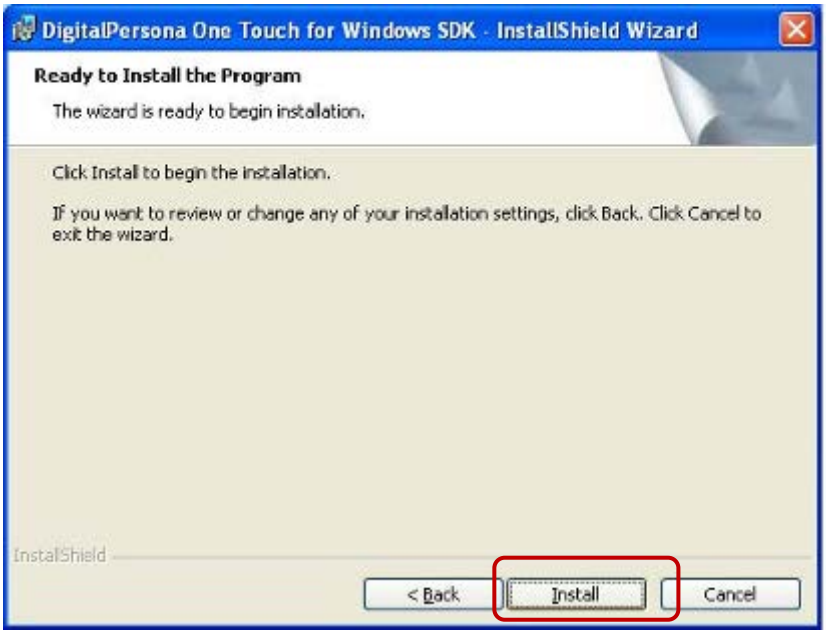

DigitalPersona One Touch for Windows SDK - InstallShield Wizard
Destination Folder
Click Next to install to this folder, or click Change to install to a different folder.
Install DigitalPersona One Touch for Windows SDK to:
C:\Program Files\DigitalPersona\
Change...
InstallShield
< Back
Next >
Cancel

7. Click “**Next**”.

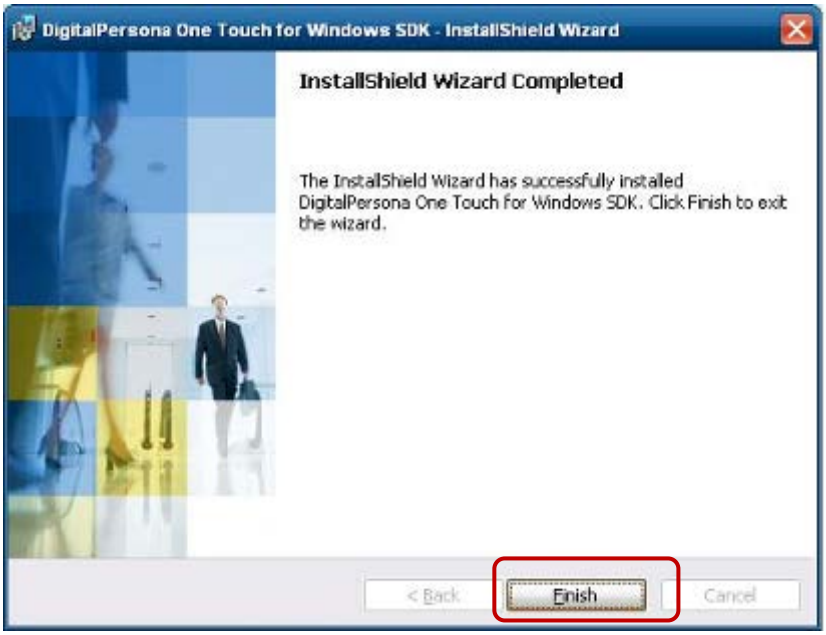


6 Device Driver Installation

8. Click "**Install**".

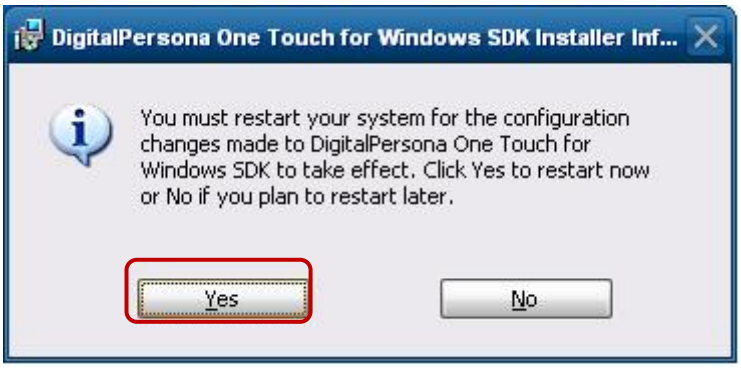

DigitalPersona One Touch for Windows SDK - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

9. Click "**Finish**".

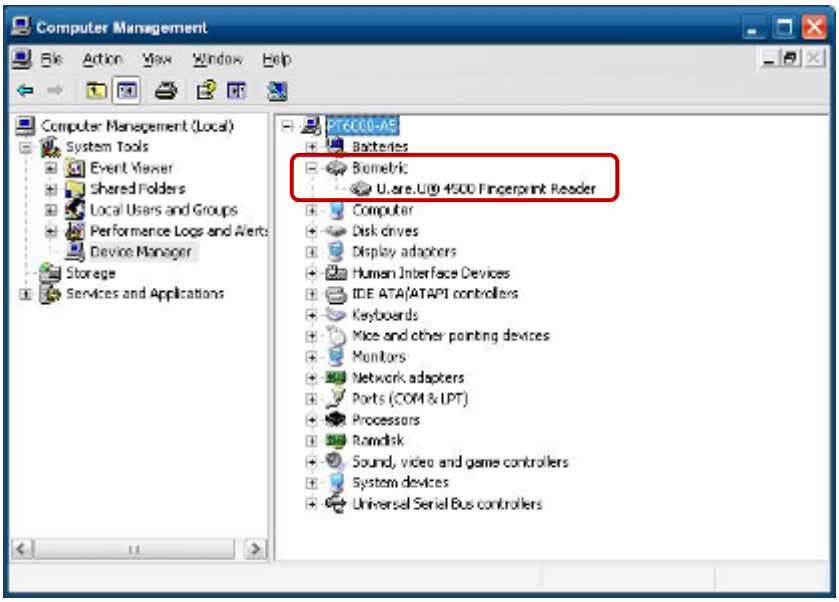

DigitalPersona One Touch for Windows SDK - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed DigitalPersona One Touch for Windows SDK. Click Finish to exit the wizard.
< Back
Finish
Cancel

6 Device Driver Installation

10. Restart systems.


DigitalPersona One Touch for Windows SDK Installer Inf...
You must restart your system for the configuration changes made to DigitalPersona One Touch for Windows SDK to take effect. Click Yes to restart now or No if you plan to restart later.
Yes
No

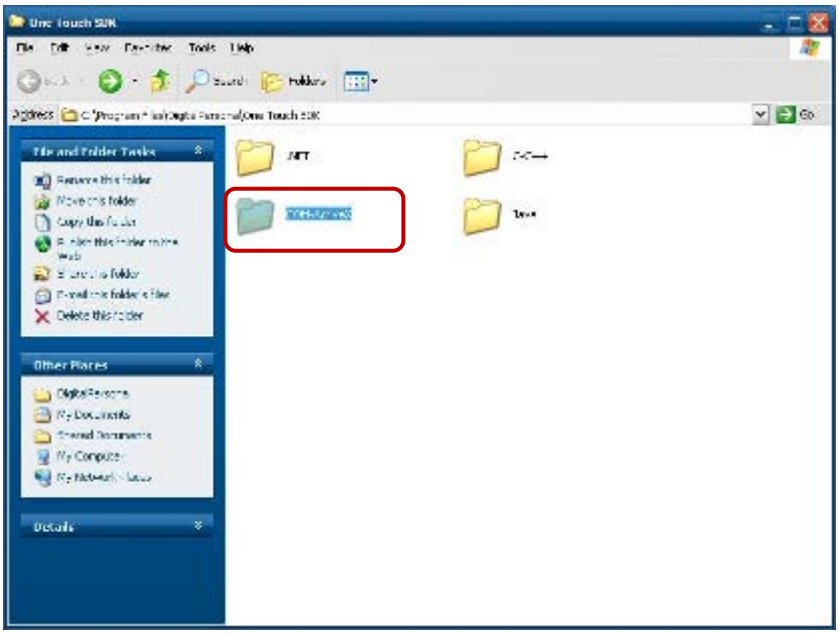
11. Check Fingerprint reader in Device Manager.



6 Device Driver Installation

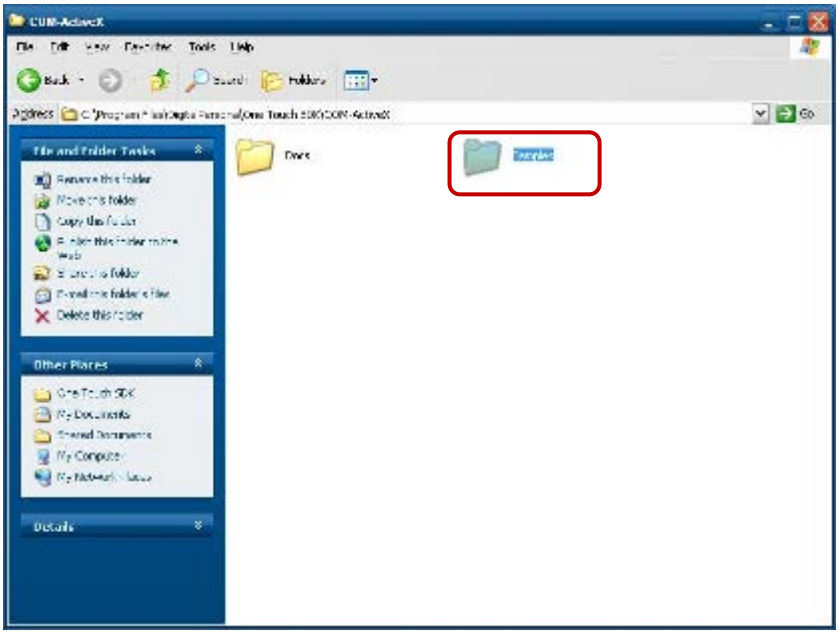
12. Launch Fingerprint reader from start menu

13. Select “COM-ActiveX”

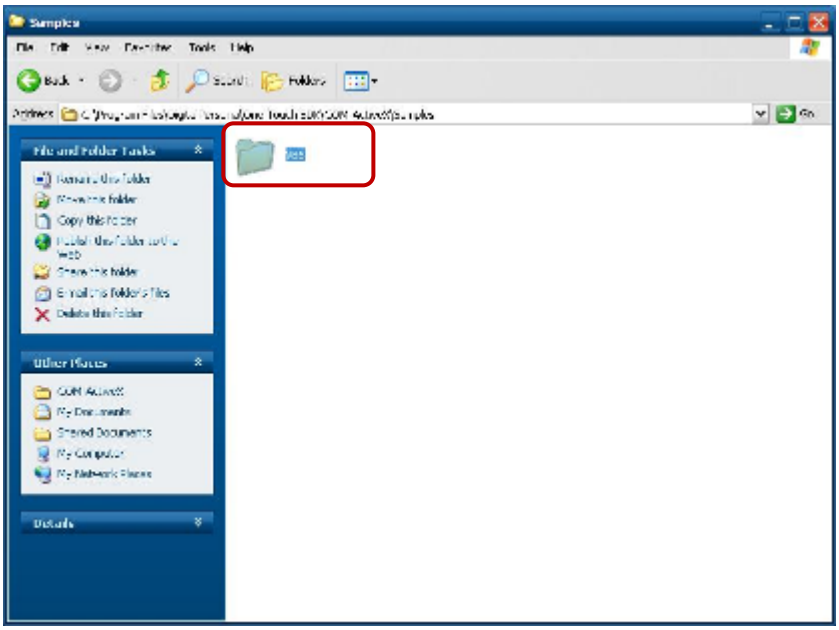


6 Device Driver Installation

14. Select "**Sample**"

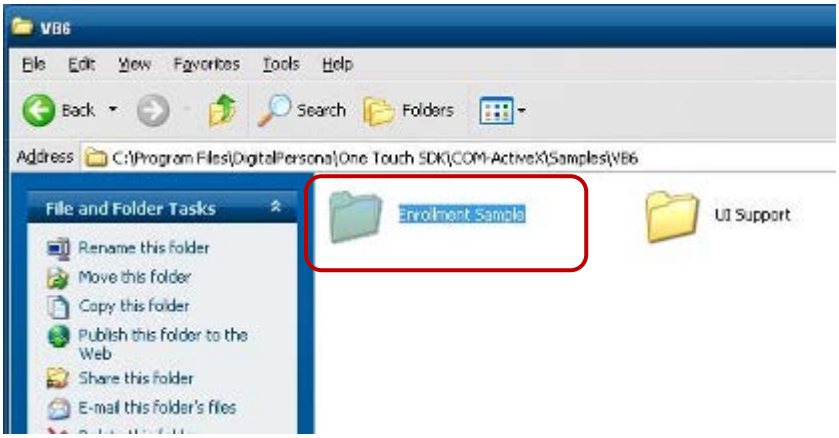


15. Select "**VB6**'.

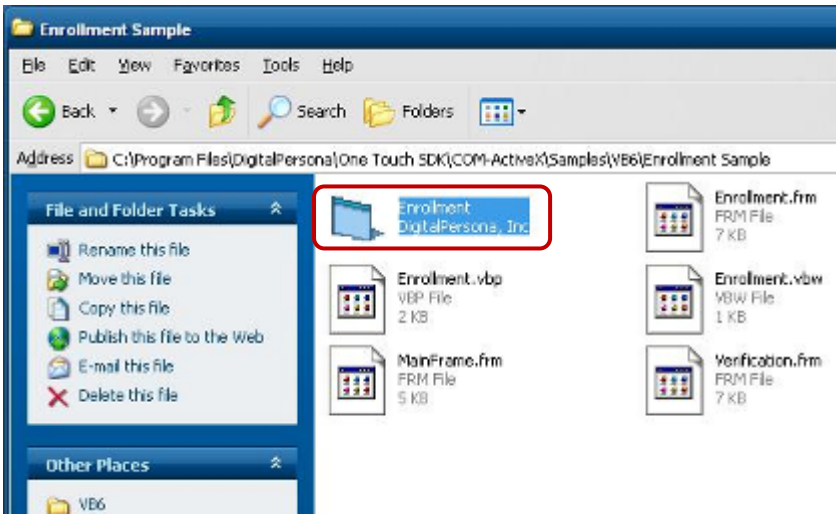


6 Device Driver Installation

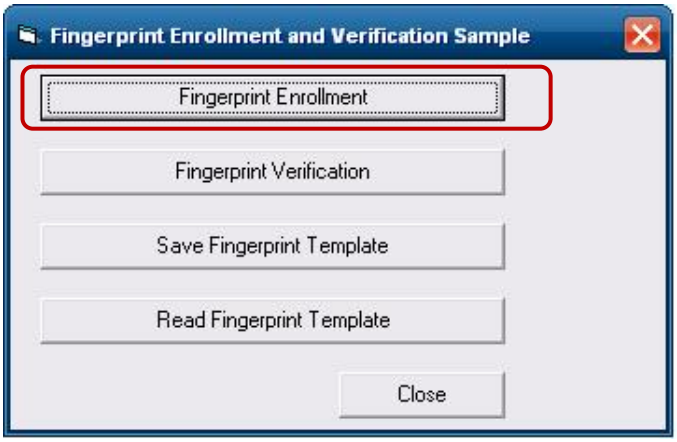
16. Select "**Enrollment Sample**".



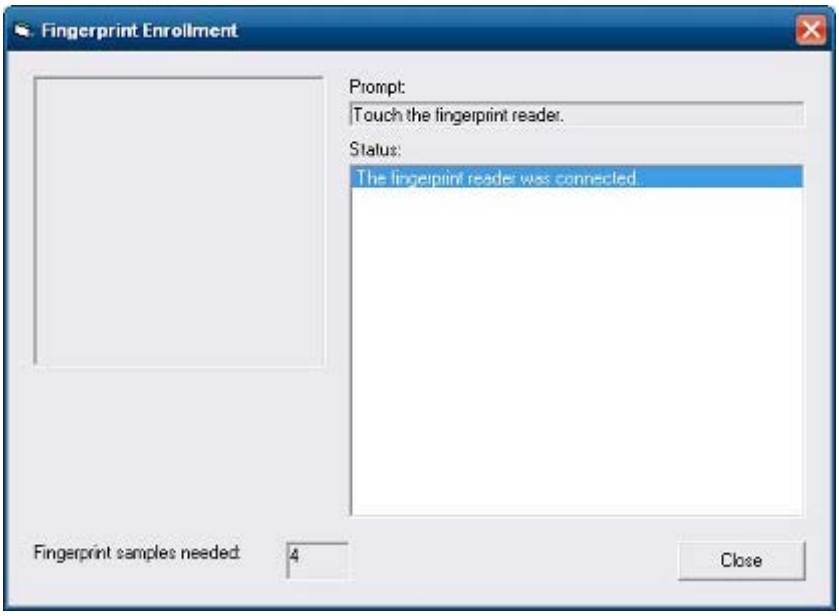
17. Enroll the fingerprint by the "**Enrollment**"



18. Select "**Fingerprint Enrollment**"

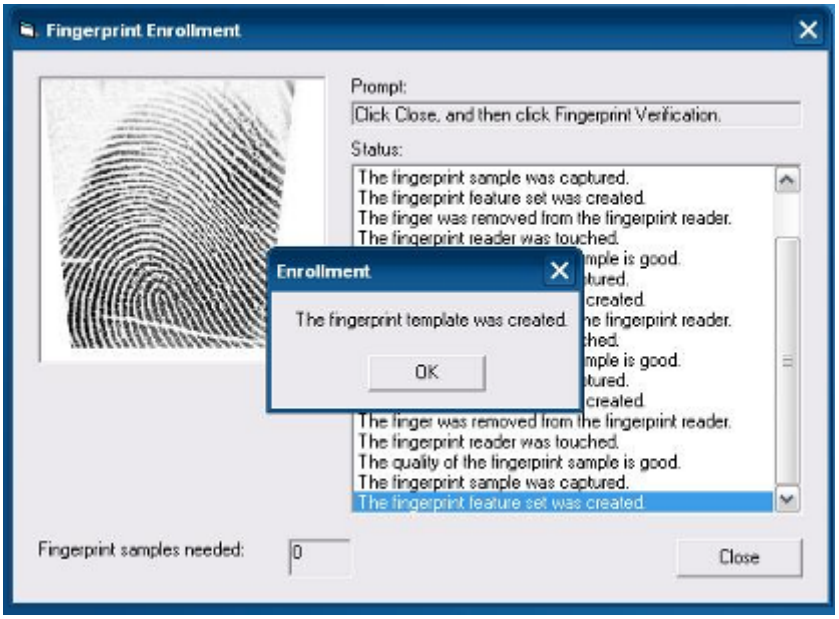


6 Device Driver Installation



19. Put your finger on fingerprint reader and follow the direction to enroller your fingerprint, it need scan your fingerprint 4 times

20. After enroller finish it will popup a dialog box


Fingerprint Enrollment
Prompt:
Click Close, and then click Fingerprint Verification.
Status:
The fingerprint sample was captured.
The fingerprint feature set was created.
The finger was removed from the fingerprint reader.
The fingerprint reader was touched.
Enrollment
The fingerprint template was created.
OK
The finger was removed from the fingerprint reader.
The fingerprint reader was touched.
The quality of the fingerprint sample is good.
The fingerprint sample was captured.
The fingerprint feature set was created.
Fingerprint samples needed:
0
Close

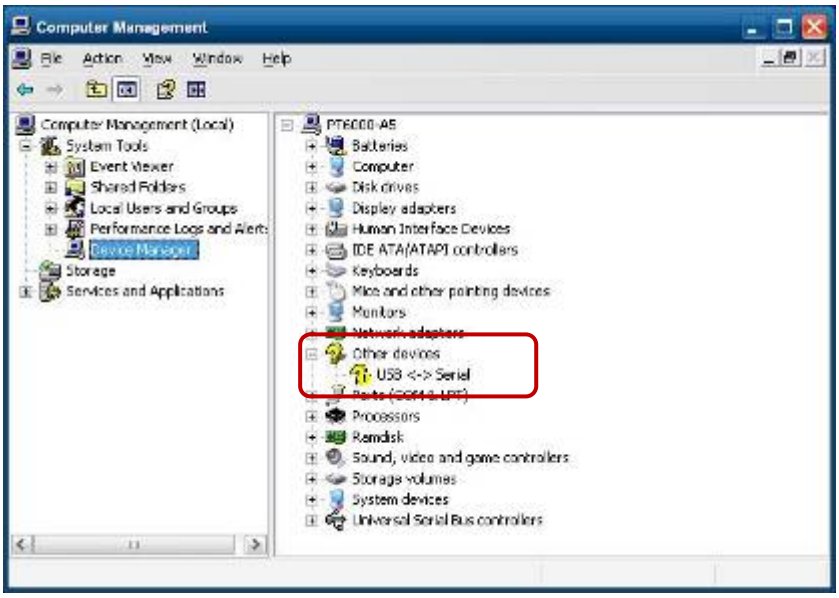
6 Device Driver Installation

6-4 RFID

1. Install (Operating System: Microsoft Windows POSReady 2009)

1.1 Check the Device Manager to verify the status of RFID reader.

Computer Management -> Device Manager -> Other devices (The device will show a question mark if the installation is not done properly.)

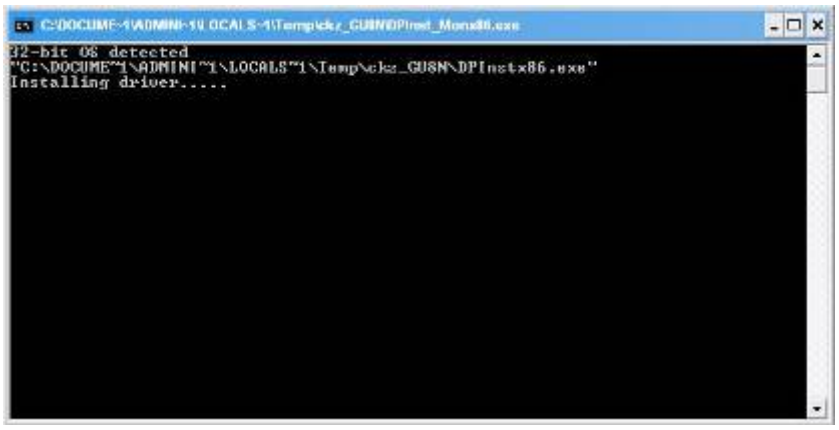


1.2 Install RFID driver，file name：XP2KxVista.exe

2-1 Path:\USB Driver\ XP2KxVista.exe

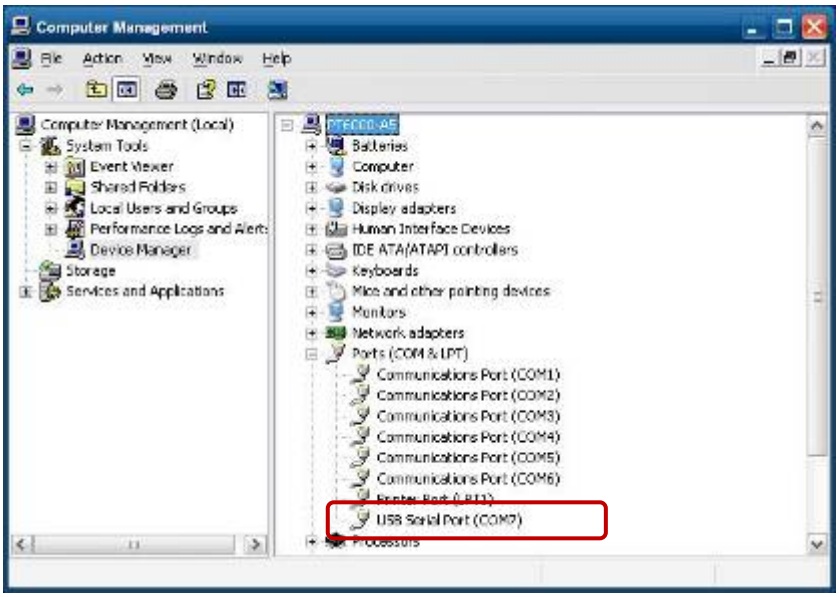
6 Device Driver Installation

1.2.1 After clicking Next, A pop up console window appears as below.



1.2.2 Check the Device Manager to verify the status of RFID reader.

Computer Management -> Device Manager -> Ports (COM & LPT)



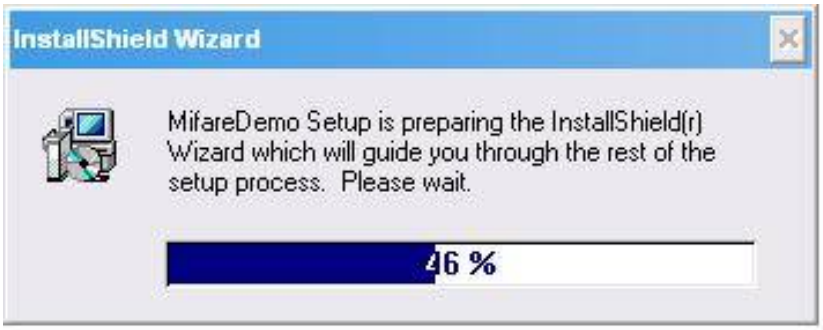
6 Device Driver Installation

1.3 install RFID utility

MifareDemoSetup_PSW00020.exe

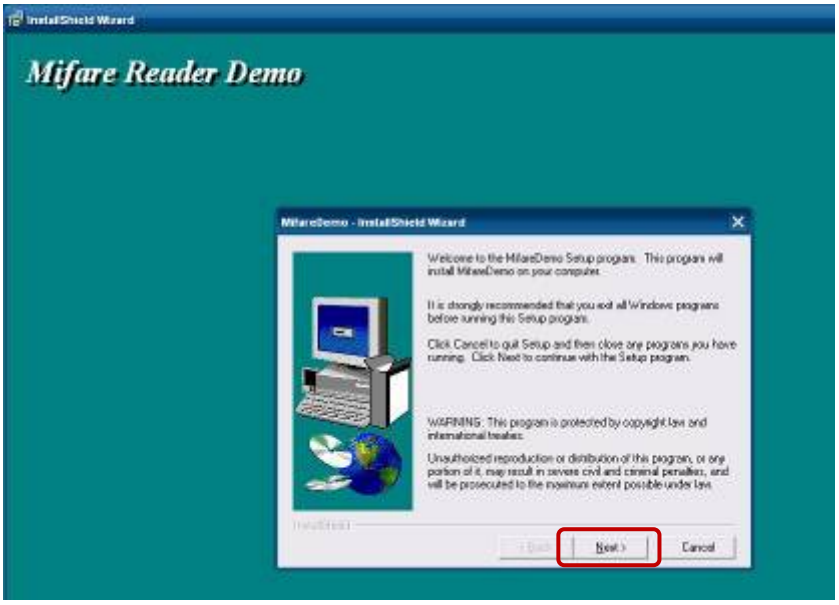
3-1 Path:\MF320\MifareDemoSetup_PSW00020.exe

1.3.1 InstallShield Wizard will be activated.

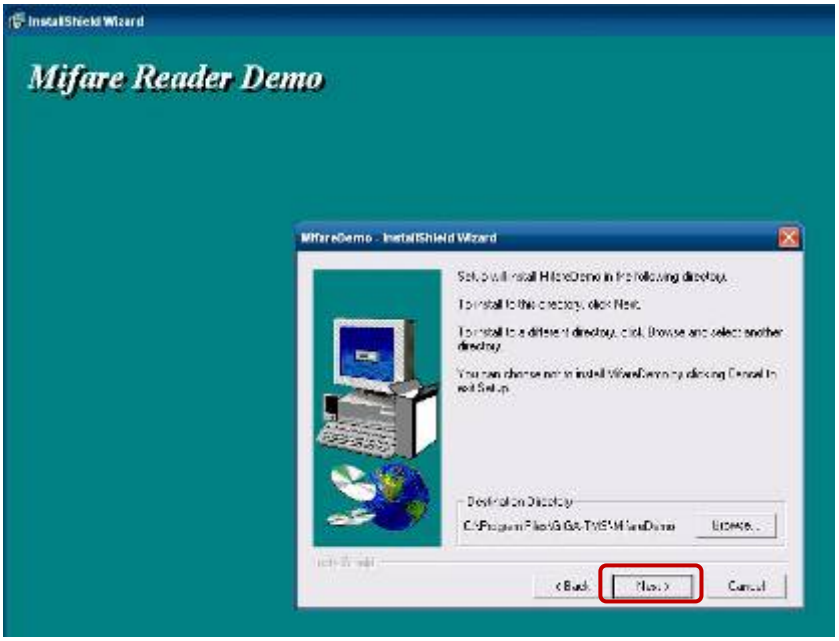

InstallShield Wizard
MifareDemo Setup is preparing the InstallShield(r) Wizard which will guide you through the rest of the setup process. Please wait.
46 %

6 Device Driver Installation

1.3.2 Click “**Next**”.

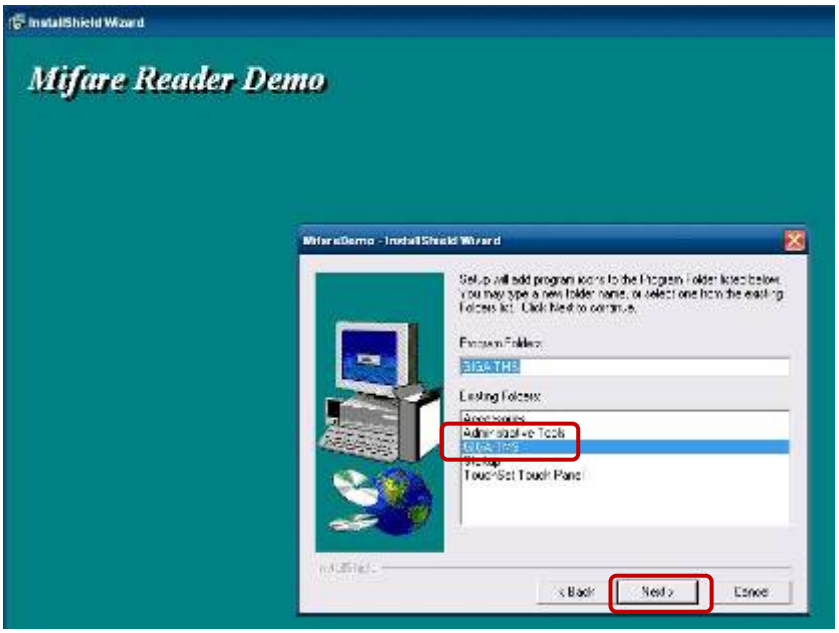

InstallShield Wizard
Mifare Reader Demo
MifareDemo - InstallShield Wizard
Welcome to the MifareDemo Setup program. This program will install MifareDemo on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

1.3.3 Click “**Next**”.

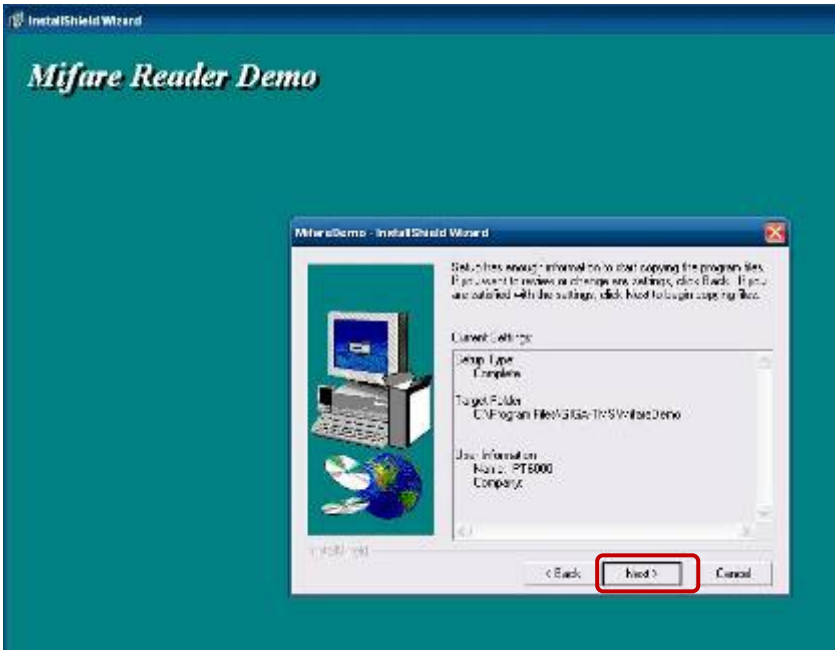


6 Device Driver Installation

1.3.4 Click “**Giga-TMS**” & “**Next**”.

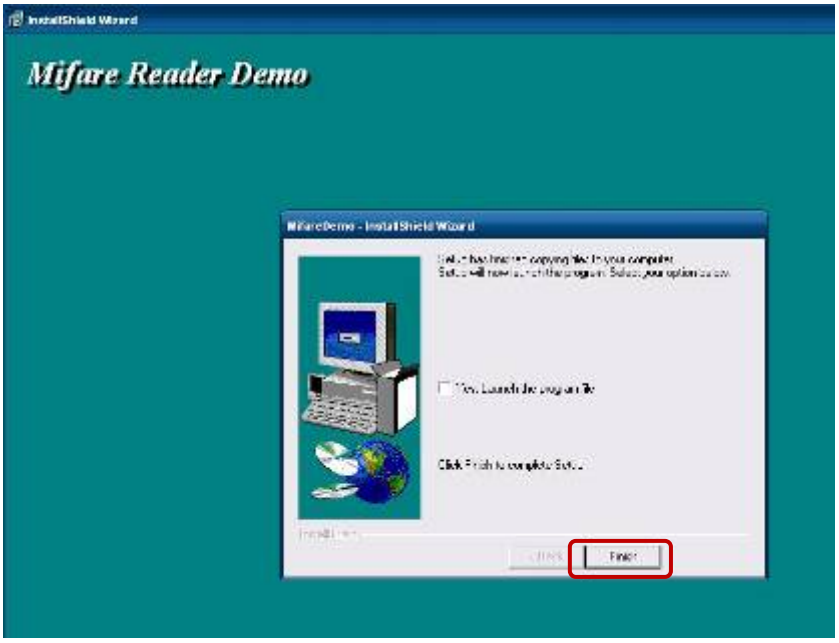


1.3.5 Click “**Next**”.

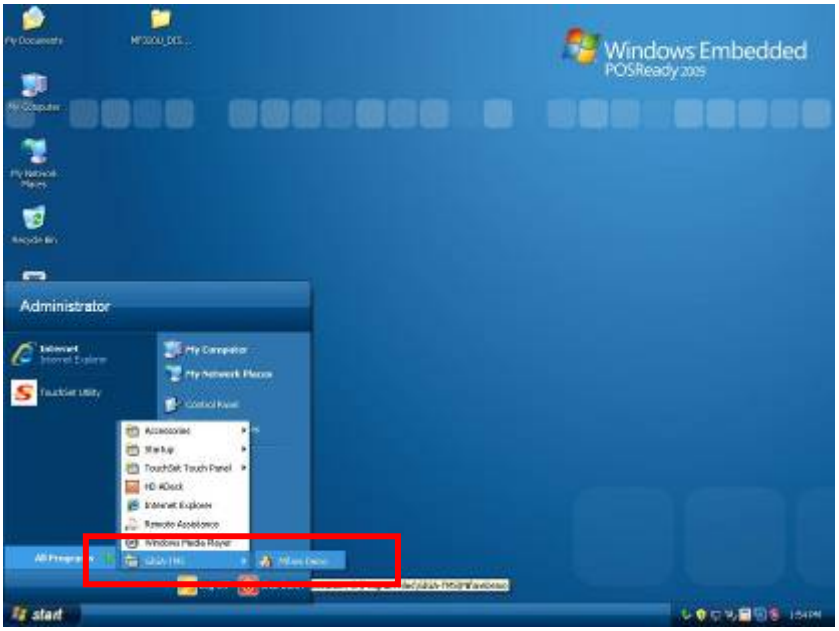


6 Device Driver Installation

1.3.6 Click "**Finish**"



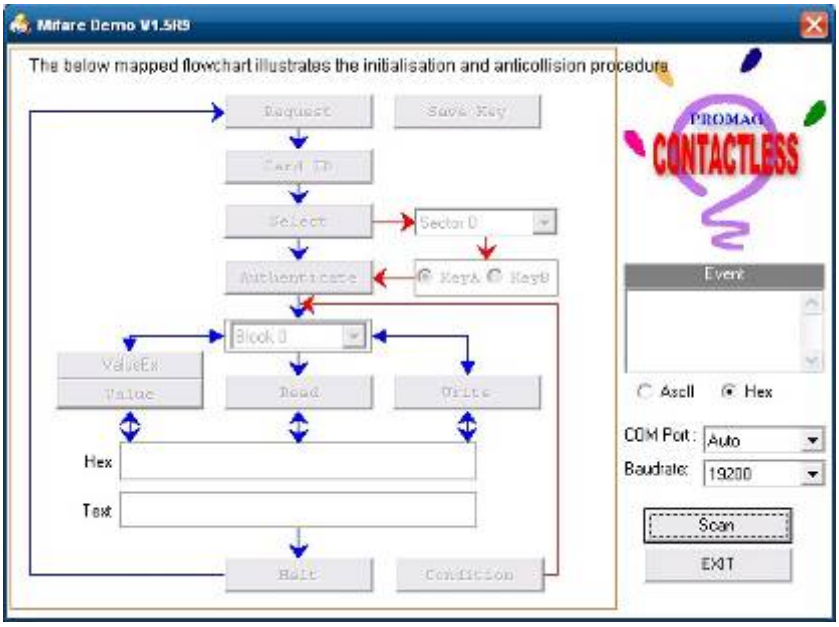
2. Run RFID demo program. Start -> All Programs -> GIGA-TMS -> **Mifare Demo**



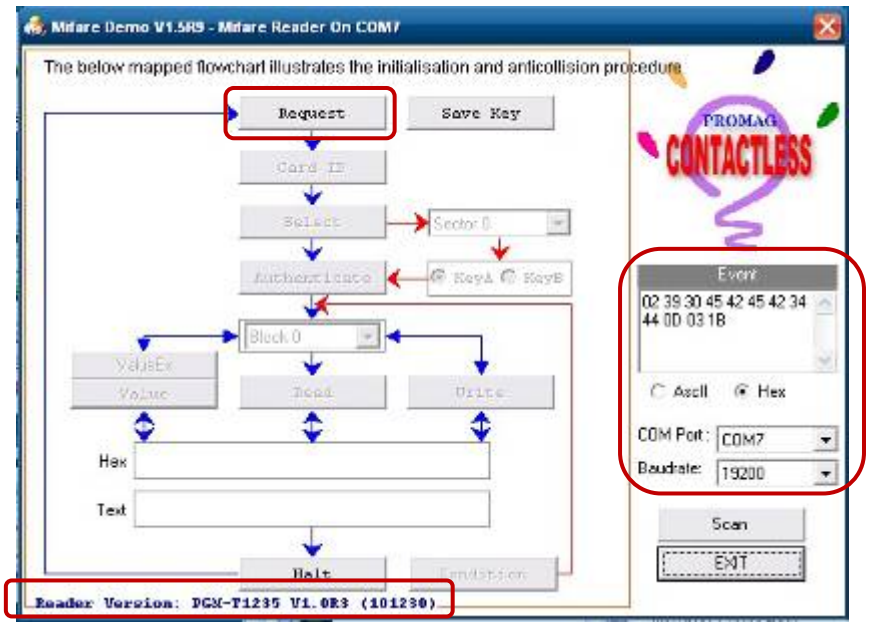
6 Device Driver Installation

2.1 Run "**Auto Scan**" Demo AP will detect the RFID reader automatically.

Or select the RFID COM port



2.2 After finishing the AutoScan, Request box will be ready for the click and Reader Version will show on the position as marked. (Reader Version: PGM-T1235 V1.0R3 (101230) Place Mifare Card to the RFID reader area. Event Dialog window gets the data from the Mifare Card.

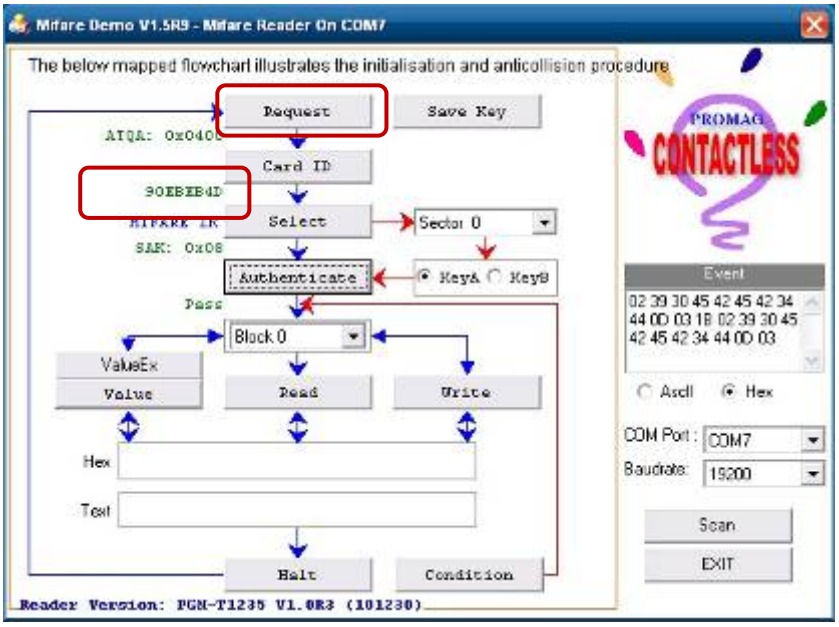


6 Device Driver Installation

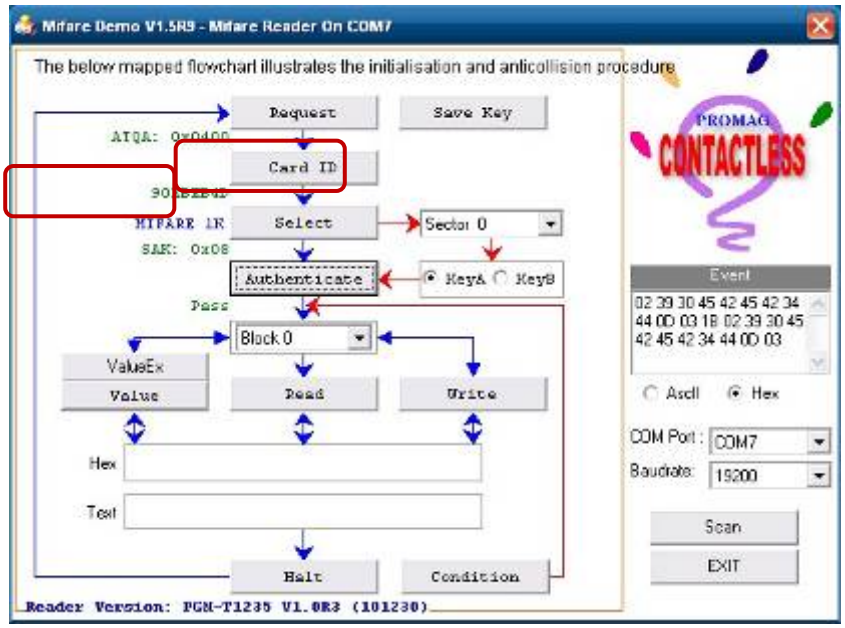
Place the RFID card on the RFID reader.

2.3 **Card type** will be recognized when you click "**Request**".

(Your Mifare card should be placed on the RFID reader area.)

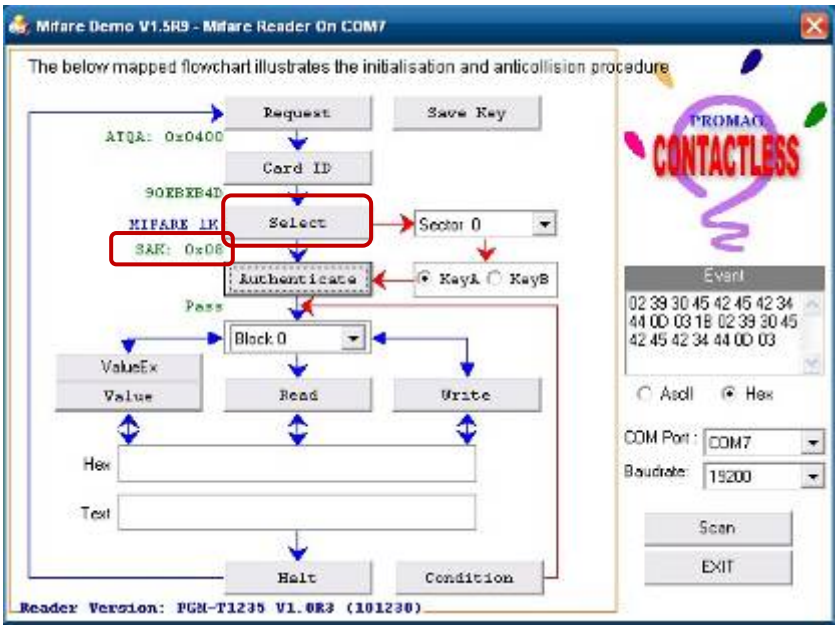


2.4 **Card ID** will be recognized when you click "**Card ID**".

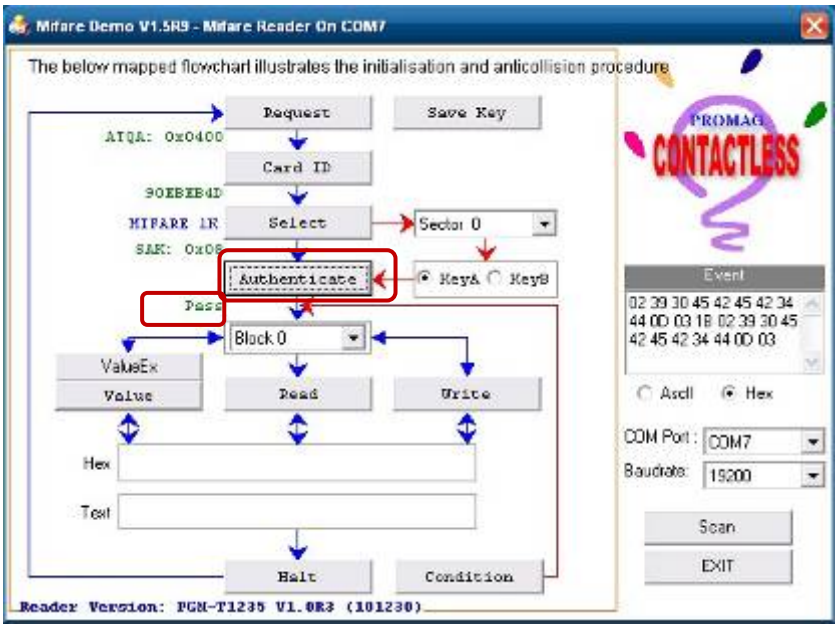


6 Device Driver Installation

2.5 **SAK** will be read when you click "**Select**".



2.6 The result will show when you click "**Authenticate**".



6 Device Driver Installation

6-5 Internal VFD

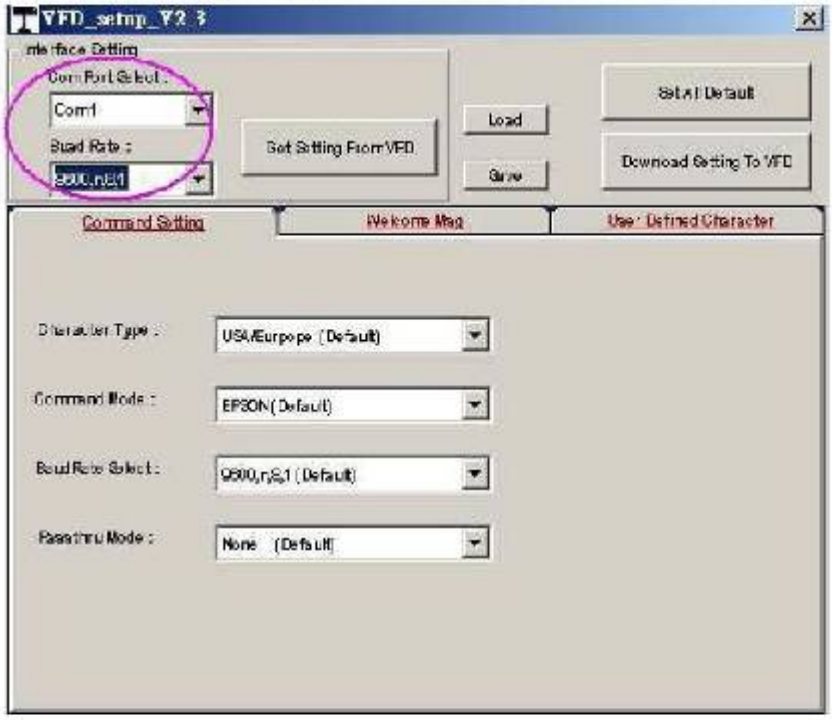
Specification			
General	Display Method	Vacuum Fluorescent Display(blue-Green)	
	Number of Characters	40 (20 Columns X 2 Lines)	
	Brightness	500 ~ 1000 cd/m2	
	Character Font	5X7 Doc Matrix	
	Character Type	95 Alphanumeric, 32 International Characters	
	Character Size	6.75(H) X 3.75(W)mm	
	Doc Size (X x Y)	0.55 x 0.75 mm	
	Download Characters	9 Characters	
Commands Mode	LD220, EPSON POS D101(default), AEDEX, UTC/S, UTC/P, ADM788, DSP800, CD5220, EMAX, LOGIC CONTROL		
Language Support	USA, France, Germany, UK, Sweden, Denmark I & II, Italy, Spain, Norway, Japan(Katakana), Slavonic, Russian, Greek, Czech, Lativain		
Interface	RS-232(Serial)		
Connection	Baud Rate	Direct Connection 9600 or 19,200 bps	
Reliability	MTBF	30,000 Hours	
Power	Consumption	5-12 VDC	
Safety	EMC Standards & Safety Standards	FCC, CE	

6 Device Driver Installation

Setup Software Utility Guide

1. Power on , and waiting test page of EEPROM test, Baud rate, and Command page. And you may set up the customer display by "VFD_Setup.exe" Utility.

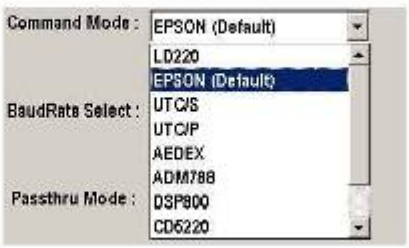
2. To execute "VFD_Setup.exe" for setup communication between display and Utility



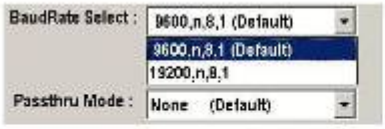
The Baud Rate will show on states page of the Utility (Note: You may check it when power on the display)

3. "Get Setting From VFD" button
To get all setting from the display and it'll refresh the "VFD_Setup.exe" utility

4. "Character Type"/ "Command Mode"/ "BaudRate Select"/ "Passthru Mode"
Please refer to Chapter 4-5 user manual



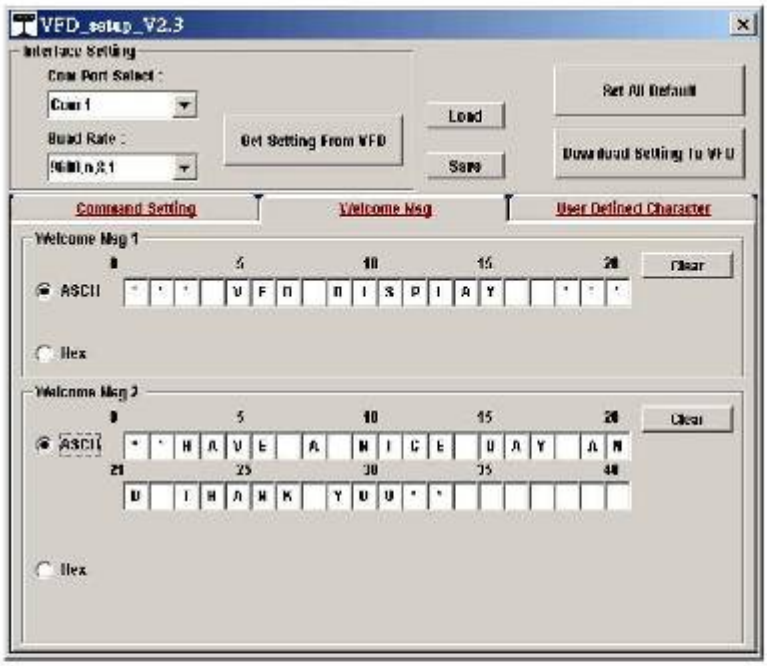
6 Device Driver Installation



5. "Set All Default" button
   To show default setting, the Default table is,
   - Character Type : USA
   - Command Type : EPSON
   - BaudRate Setting : 9600/n/8/1
   - Passthru Mode : None
   - Welcome msg line1 : *** VFD DISPLAY ***
   - Welcome msg line2 : **HAVE A NICE DAY AND THANK YOU**

6. Welcome Msg
   Welcome Msg line1 maximum 20 characters, line 2 maximum 20 characters, total of 40 characters.

   a. ASCII mode

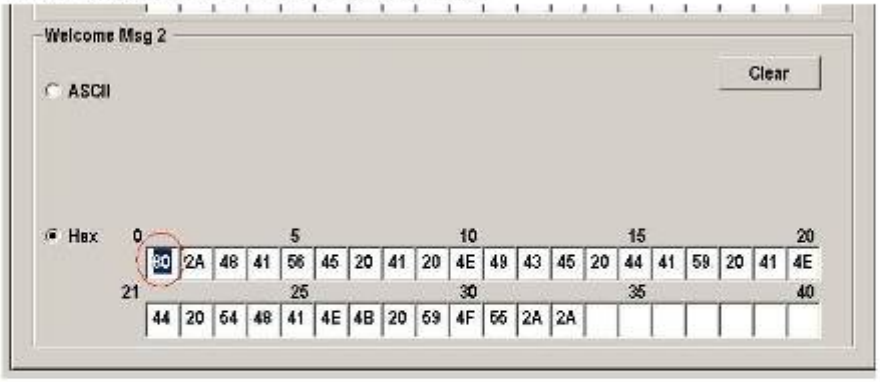


   You can type the character by keyboard (0x20h ~ 0x7Fh), if you press clear icon, it will clear the all Msg characters on AP.

   b. Hex mode
   Hex mode can define the character from 0x20h to0xFFh，the range 0x80~0xFF

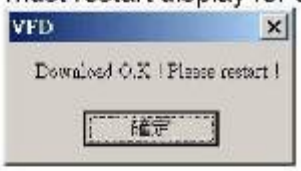
6 Device Driver Installation

which depends on the code page table.



Like the first character (0x80) ，in default code page will show Ç on display。

7. "Download setting to VFD" button
   This button is to download the setting from VFD_Setup.exe to display.
   *After success dialog "Download O.K ! Please restart !" message popped up, you must restart display for enable new setting.



8. "Save" button
   To save user's setting in file, example: below picture to save file name as "Rename-GOODLUCK" file set for Welcome Msg.
   P.S : The default setting named "VFD.vfd" which can't be made any setting change.

9. "Load' button
   For saving your time, you could load any setting file which you made before to the display. You must restart the display for enable the new settings.

6 Device Driver Installation

6-6 i-Button Reader Configuration Utility

The i-Button Reader Configuration Utility is used to set up the output format of HID MSR

Installation

Below steps guide you how to install the Utility program.

- Insert the setup CD
- Run the **HID_MSR_PSW00003_V2_0_0.exe** setup file that is located in the Software folder of CD.
- Follow the wizard to complete the installation.

Launching Program

Below steps guide you how to load the **Utility** program.

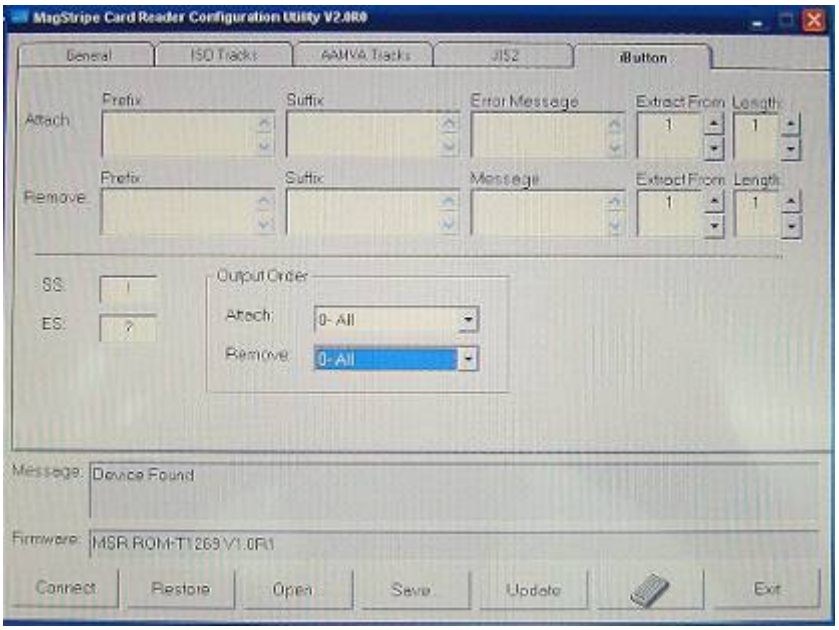
- From **Start/Programs**, click **HID_MSR2** folder
- Click **MagStripe Card Reader Configuration Utility** to launch the program.

6 Device Driver Installation

- The utility program will detect the connected reader. If detected, all the input text boxes will be enabled.
- If the reader has not been connected to PC yet, please connect the reader and then click **Refresh** to get connected.

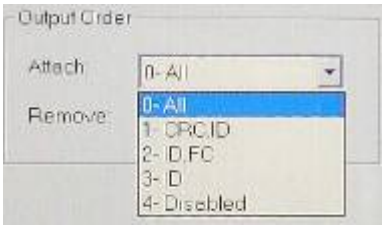
Configuration

Below is the main window of i-Button **Utility** program.



For the settings, there are:

- **Prefix/Suffix:** Defines the data string which you would like to append in front or end of the i-Button key string.
- **Error Message:** Indicates error message when i-Button key read fail.
- **Message:** Indicates message when i-Button key read correctly
- **SS/ES :** Define Start and End sentinel byte for the i-Button ID string
- **Length :** i-Button ID length request from 0~16
- **Output order :** 4 format could be select at Attach /Remove i-Button ID



6 Device Driver Installation

Update Settings

Once complete the settings, click **Update** to update the settings to connected HID MSR reader.

Save Settings

To save the settings to a file, click **Save**; specify the file name and location to be saved.

Open Settings

To load pre-saved settings, click **Open**, specify the settings file, and then click OK to load into program.

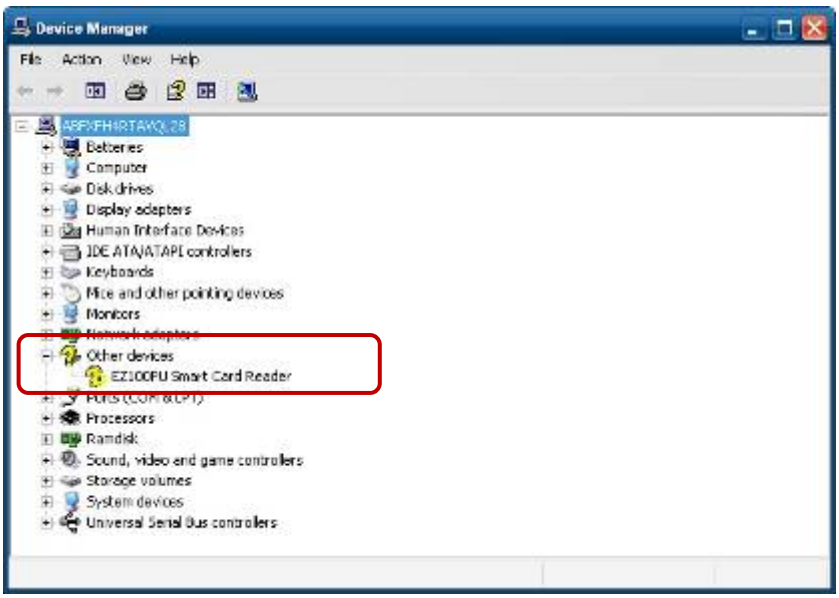
Restore iButton Reader Settings

To load restore settings of connected iButton reader, click **Restore ES2:** End sentinel for track.

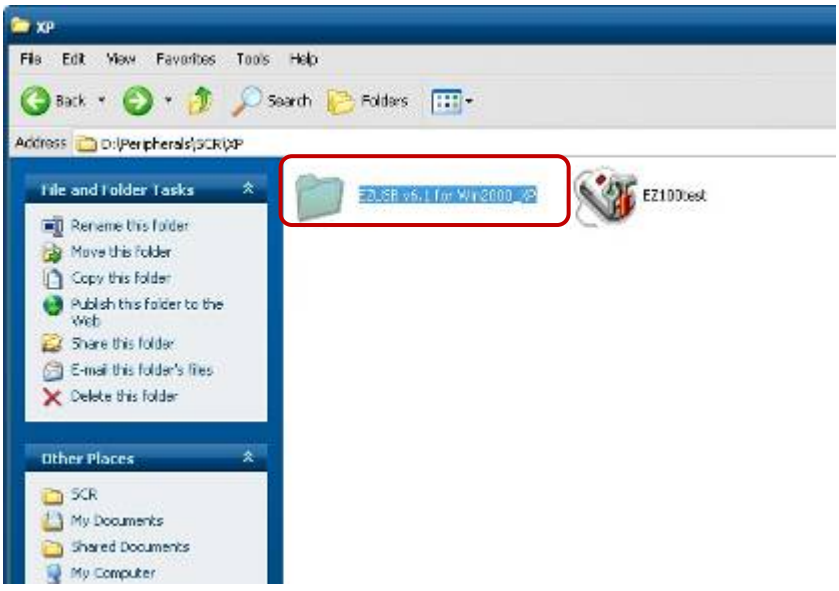
6 Device Driver Installation

6-7 Installation and Testing of Smart Card Reader

1. Check smart card reader be detected by “Device manager”.



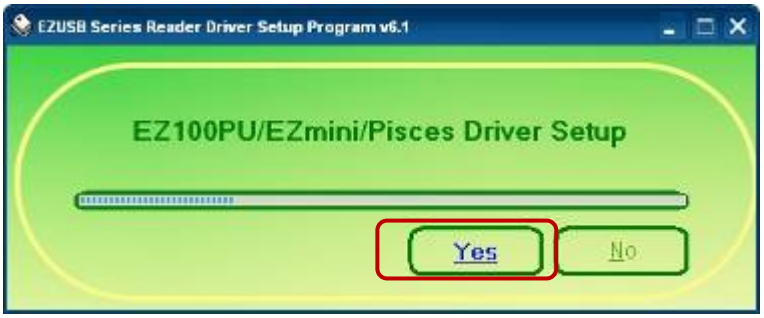
2. Install the SCR driver.



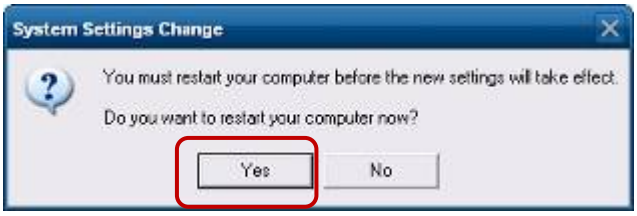
6 Device Driver Installation

3. Run Setup.exe.

4. Click "**Yes**".

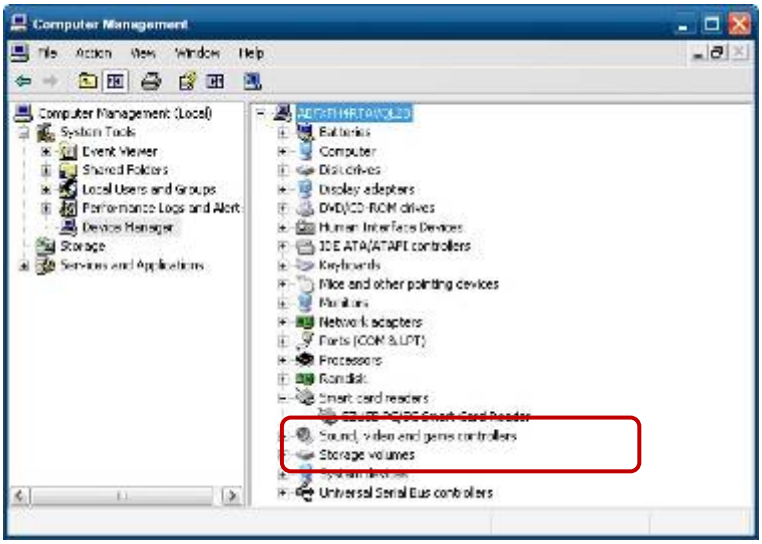


5. Restart systems.

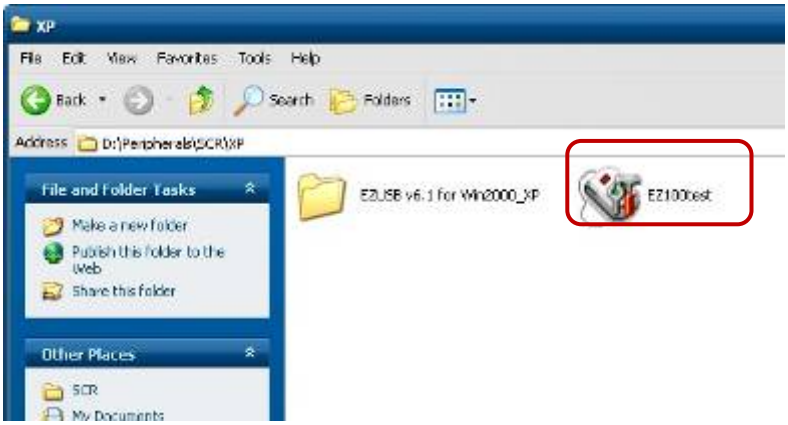

System Settings Change
You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

6 Device Driver Installation

6. Check SCR reader in Device Manager.

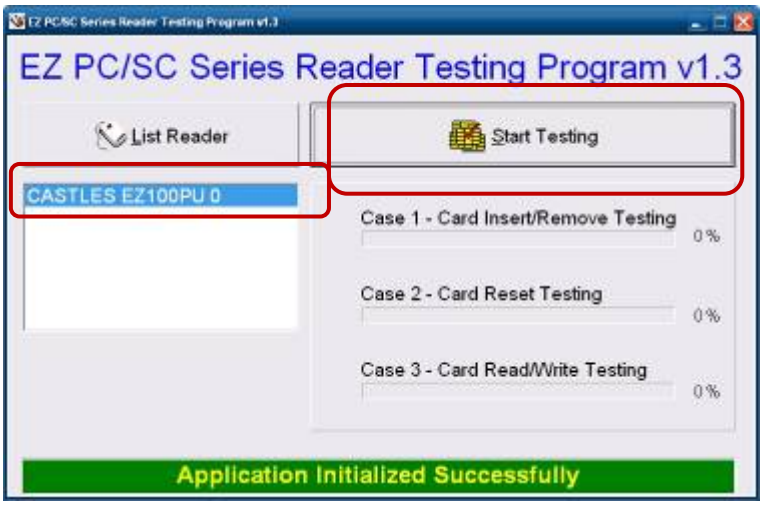


7. Run the testing program – EZ100test.



6 Device Driver Installation

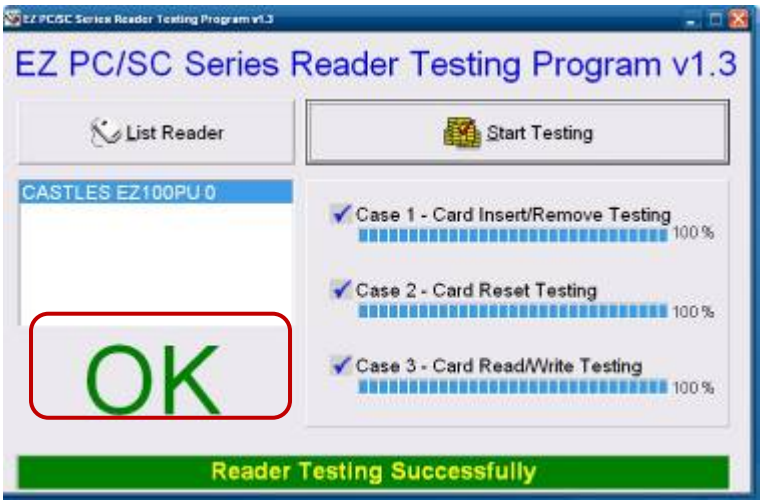
8. Conferm that SCR can be detected by the testing program, then run the program - the Start Testing.



9. Follow dialog boxes displayed to remove and insert card.

Insert/Remove Card
Please REMOVE card and see if the light is GREEN
Stop
Insert/Remove Card
Please INSERT card and see if the light is RED
Stop

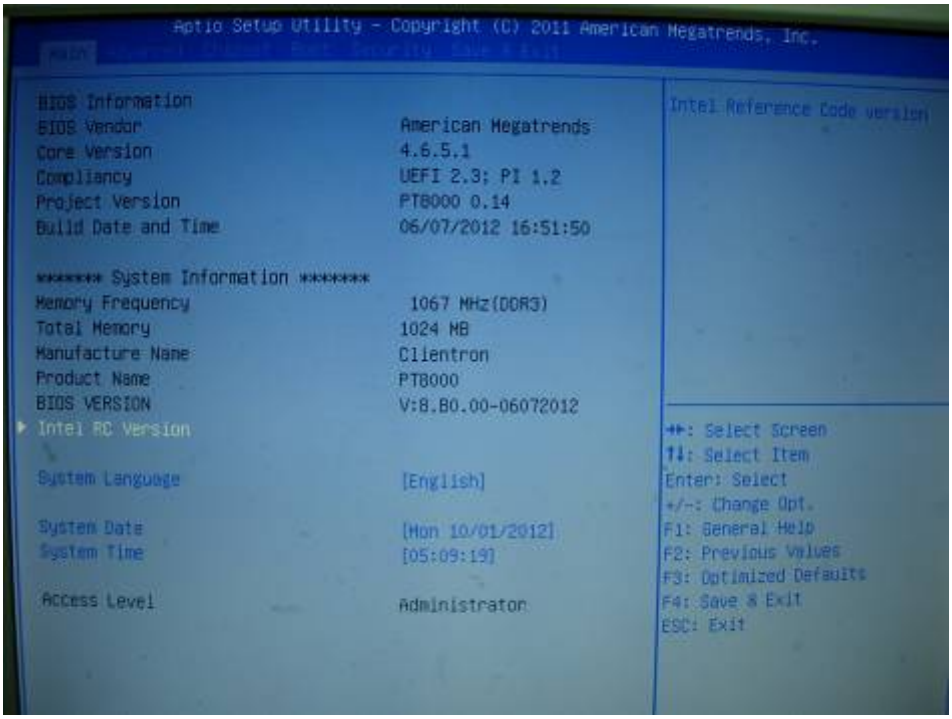
10. After finishing the testing, the dialog box will show "**oK**".



7 BIOS/Utility setup

Press <DEL > / <F2> key to enter BIOS SETUP UTILITY when system boot up.

☆ **Please press <DEL > / <F2> key tenderly and slowly.**



Date and Time

The Date and Time items show the current date and time on the computer. If you are running a Windows OS, these items are automatically updated whenever you make changes to the Windows Date and Time Properties utility.

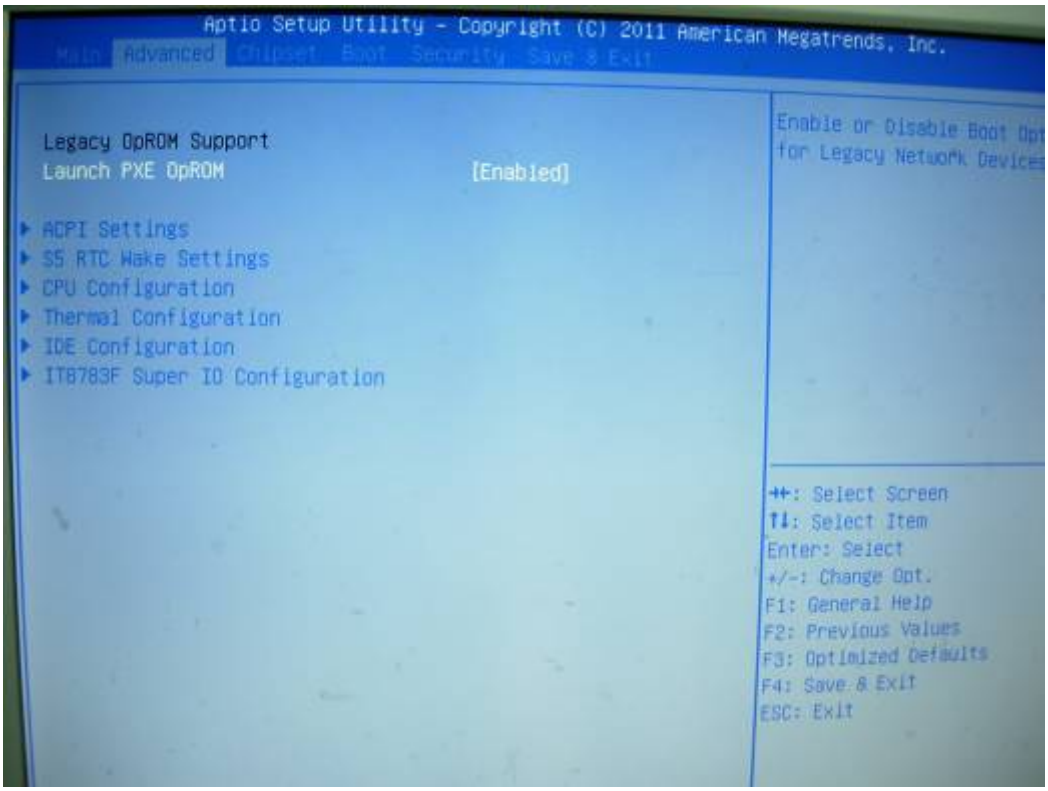
WARNING!

Setting the wrong values in the sections below may cause the system to malfunction. Make sure that the settings made are compatible with the hardware.

7 BIOS/Utility setup

7-1 Advanced

Use the Advanced menu to configure the CPU and peripheral devices through the following sub-menus:

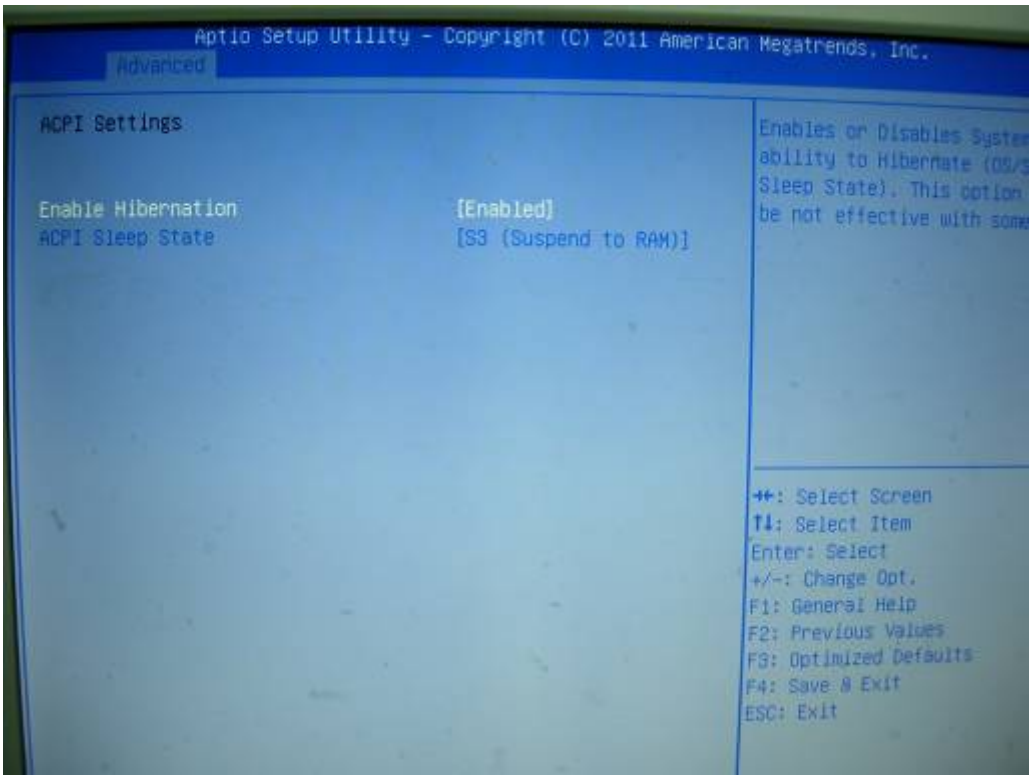


Launch PXE OPROM: Enable or Disable PXE Function

7 BIOS/Utility setup

7-1-1 ACPI Configuration

The ACPI Configuration menu configures the Advanced Configuration and Power Interface (ACPI) options



ACPI Sleep State

Use the ACPI Sleep State option to specify the sleep state the system enters when it is not being used.

1. Suspend Disabled

2. S1 (CPU Stop Clock)

DEFAULT The system enters S1 (POS) sleep state. The system appears off. The CPU is stopped; RAM is refreshed; the system is running in a low power mode.

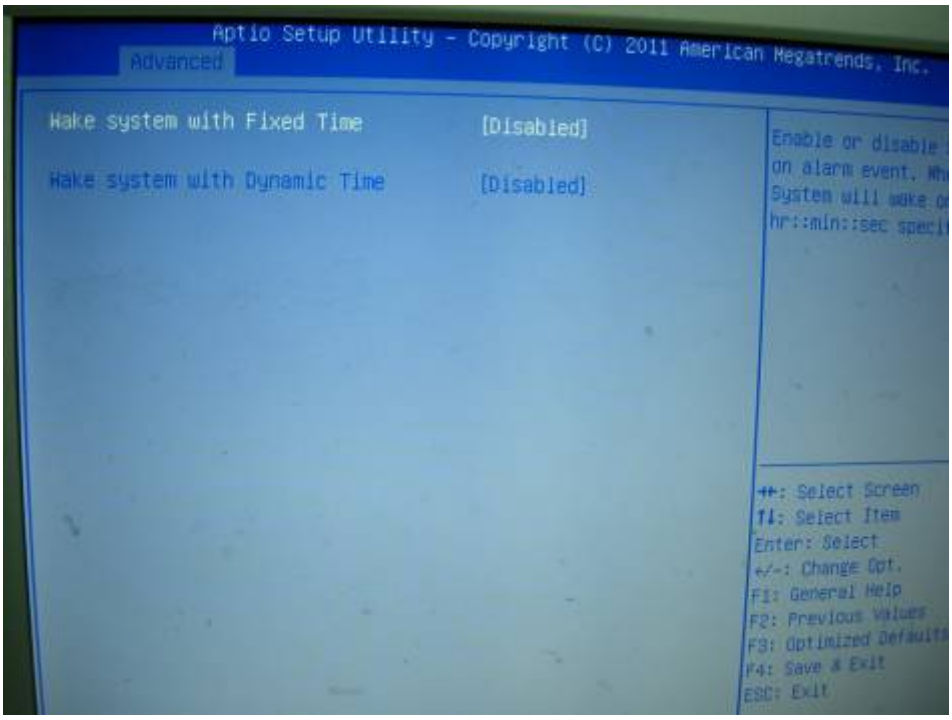
3. S3 (Suspend to RAM)

The caches are flushed and the CPU is powered off. Power to the RAM is maintained. The computer returns slower to a working state, but more power is saved.

7 BIOS/Utility setup

7-1-2 S5 RTC Wake Settings

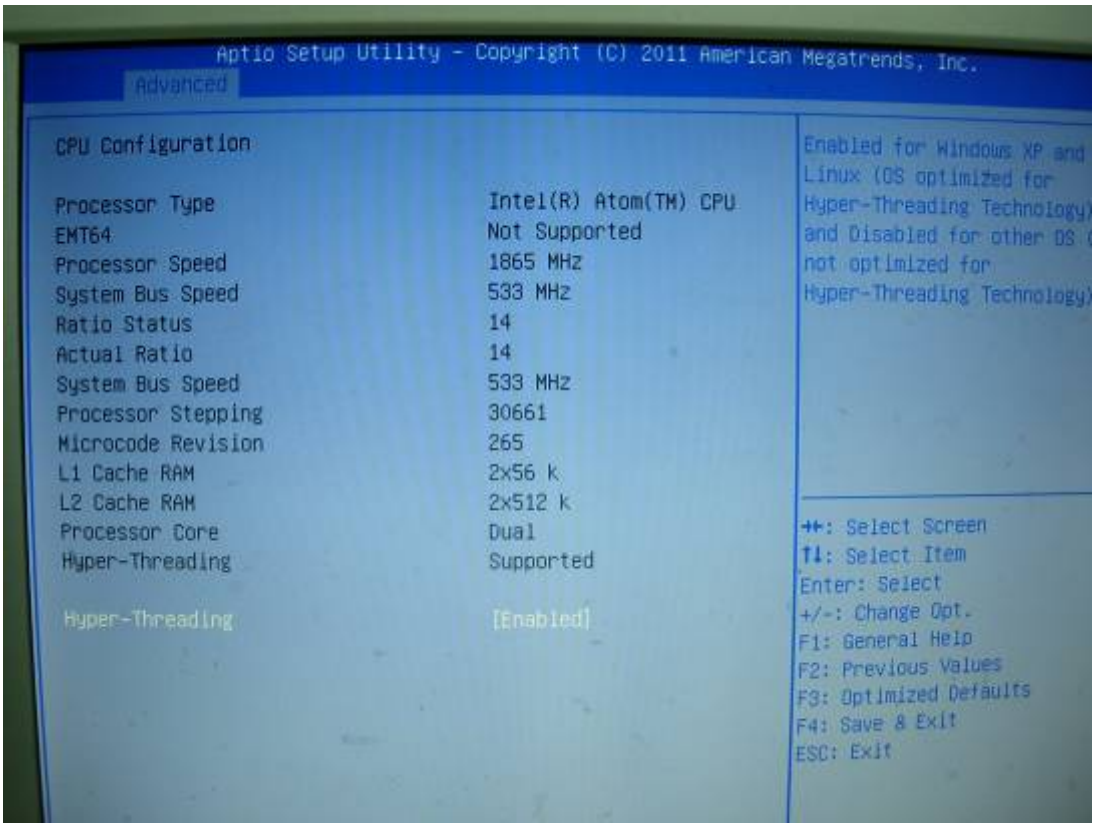
Enable or disable system wake on alarm event. When enabled, system will wake on the hr::min::sec specified.



7 BIOS/Utility setup

7-1-3 CPU Configuration

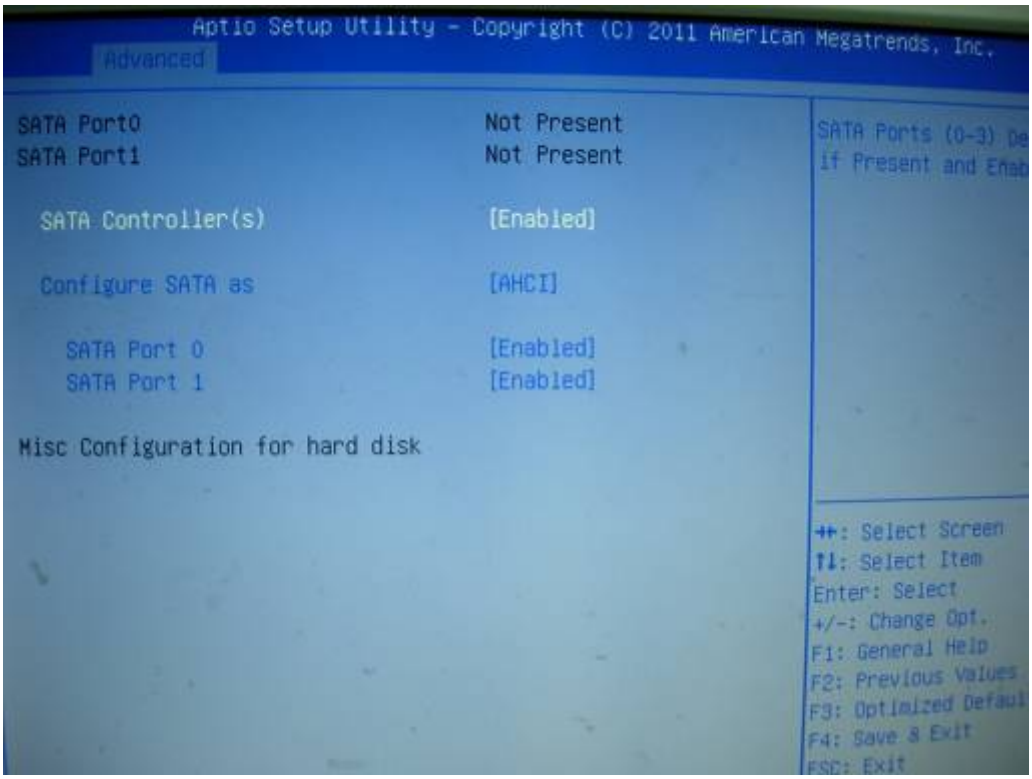
Use the CPU Configuration menu to enter the CPU Information submenu or setup Intel CPU parameter.



7 BIOS/Utility setup

7-1-4 IDE Configuration

Use the SATA Configuration menu to change and/or set the configuration of the SATA devices installed in the system.



SATA Mode

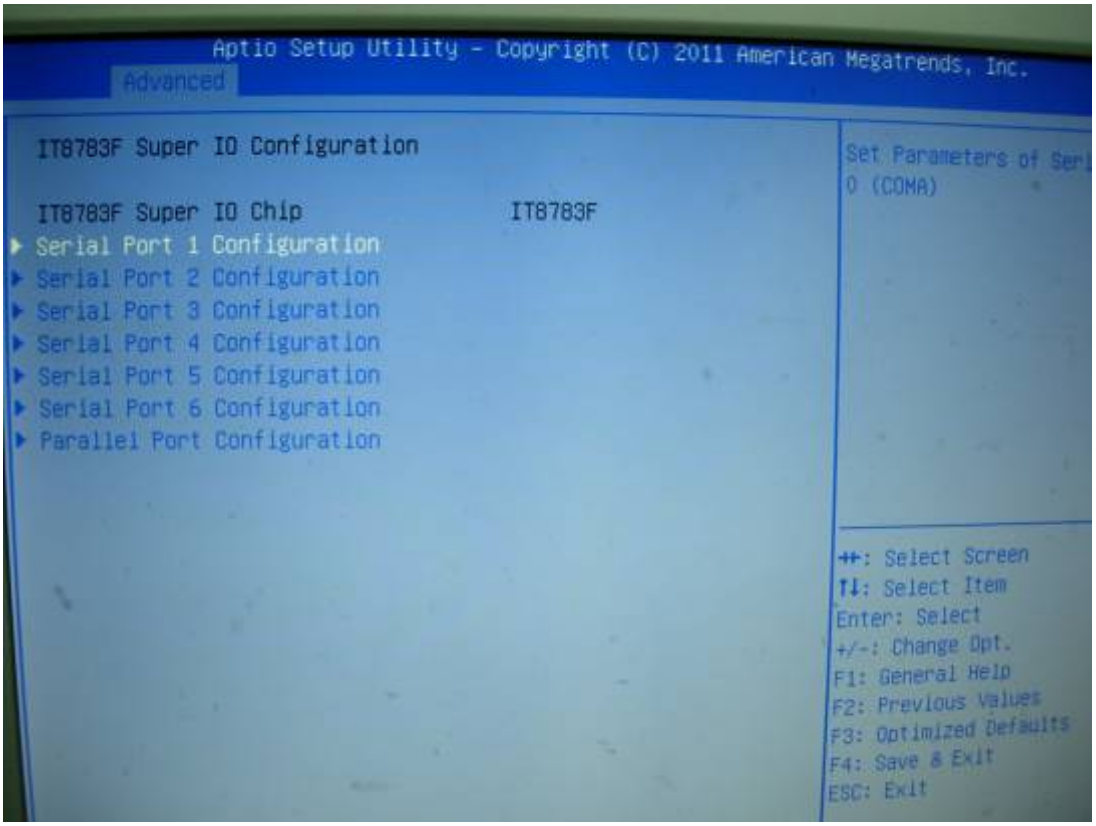
Use the SATA Mode option to configure SATA devices as normal IDE devices.

Disable	Disables SATA devices.
IDE Mode	Configures SATA devices as normal IDE device.
RAID Mode	Configures SATA devices as RAID device.

7 BIOS/Utility setup

7-1-5 IT8783F Super IO Configuration

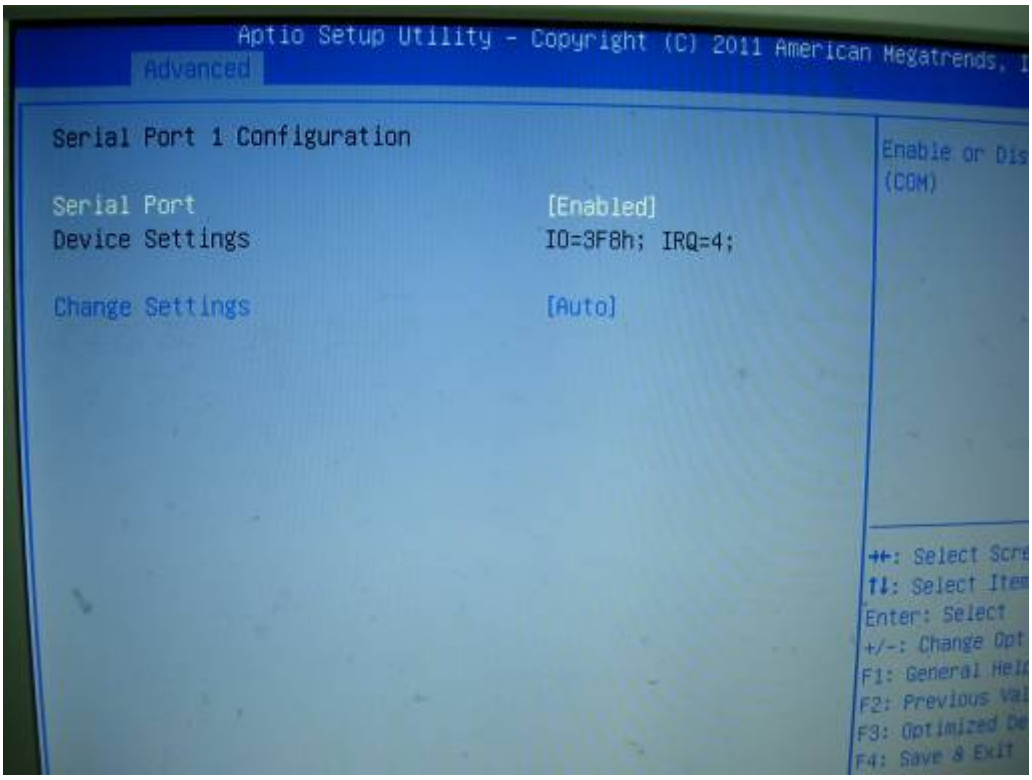
Use the Super IO Configuration menu to set or change the configurations for parallel ports and serial ports.



7 BIOS/Utility setup

Serial Port n Configuration

Use the Serial Port n Configuration menu to configure the serial port n.



Serial Port [Enabled]

Use the Serial Port option to enable or disable the serial port.

Disabled Disable the serial port

Enabled Enable the serial port

Change Settings [Auto]

Use the Change Settings option to change the serial port IO port address and interrupt address.

Auto The serial port IO port address and interrupt address are automatically detected.

Serial Port 1/2 Voltage Select [STD]

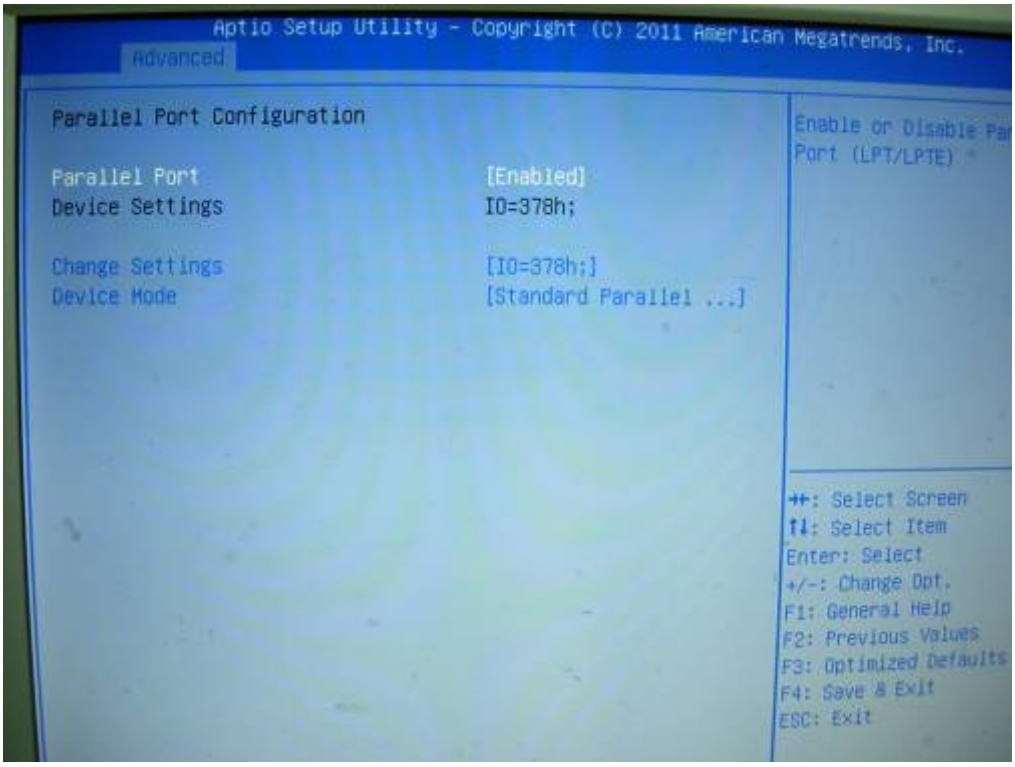
Select "COM1/2 PIN9 Function" and press <Enter> to setup COM 1/2 PIN9 function.

ITEM	Option	Descriptions
COM1 PIN9 Function	STD (Default) 5V 12V	COM1/2 Pin9 select RING function
COM2 PIN9 Function		COM1/2 Pin9 select 5V/12V function

7 BIOS/Utility setup

7-1-6 Parallel Port Configuration

Use the Parallel Port Configuration menu to configure the parallel port.



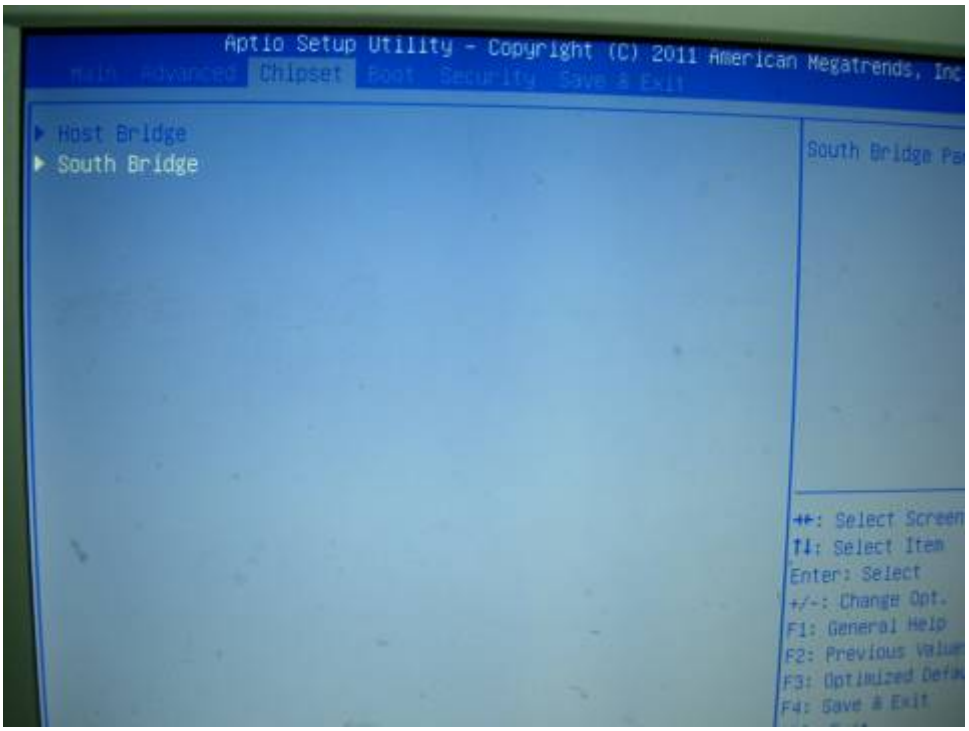
7 BIOS/Utility setup

7-2 Chipset

Use the Chipset menu to access the Southbridge configuration menus

WARNING!

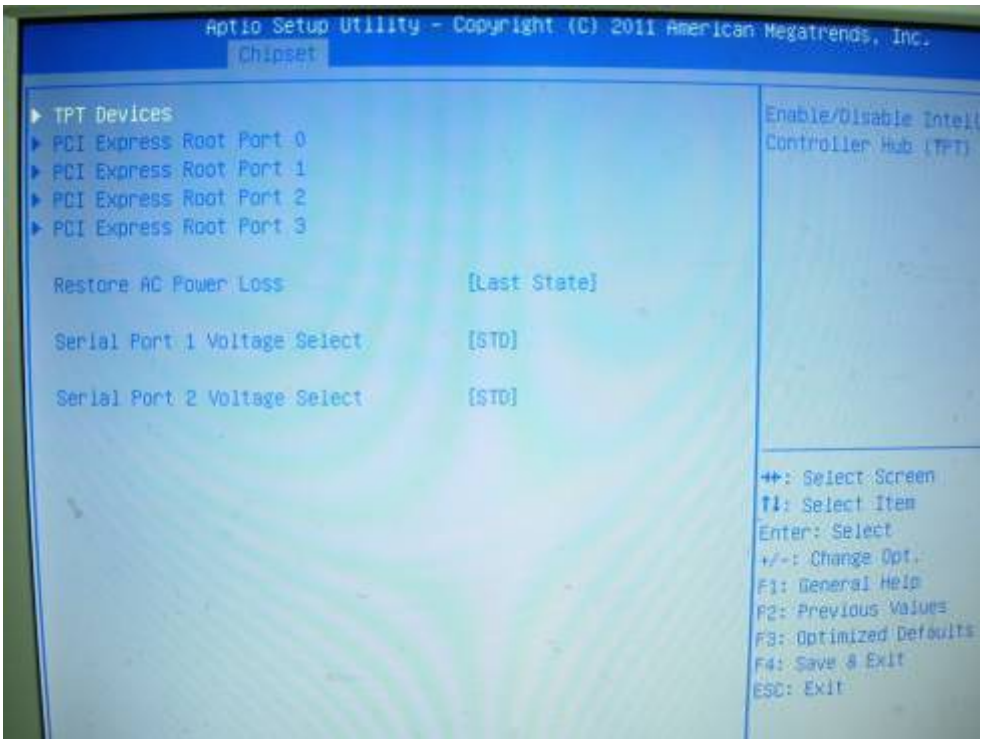
Setting the wrong values for the Chipset BIOS selections in the Chipset BIOS menu may cause the system to malfunction.



7 BIOS/Utility setup

7-2-1 Southbridge Configuration

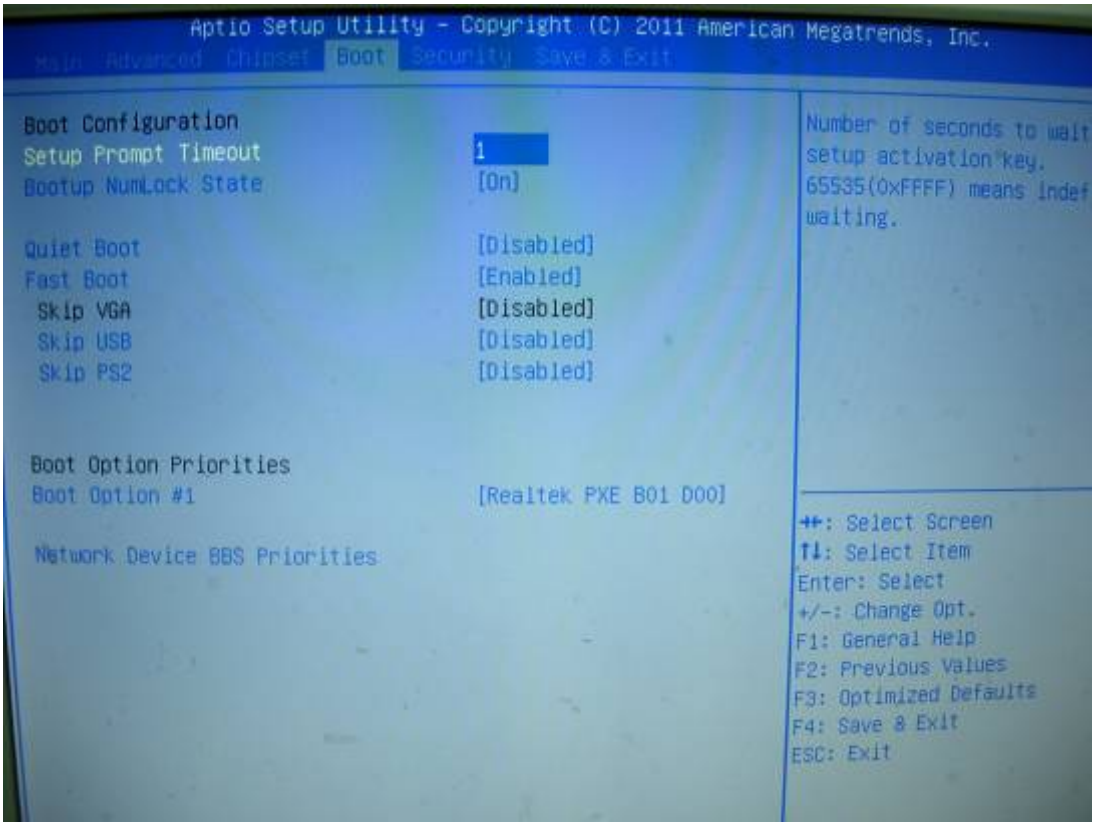
Use the Southbridge Configuration menu to configure the Southbridge chipset.



7 BIOS/Utility setup

7-3 Boot

Use the Boot menu to configure system boot options.



Bootup NumLock State [On]

Use the Bootup NumLock State BIOS option to specify if the number lock setting must be modified during boot up.

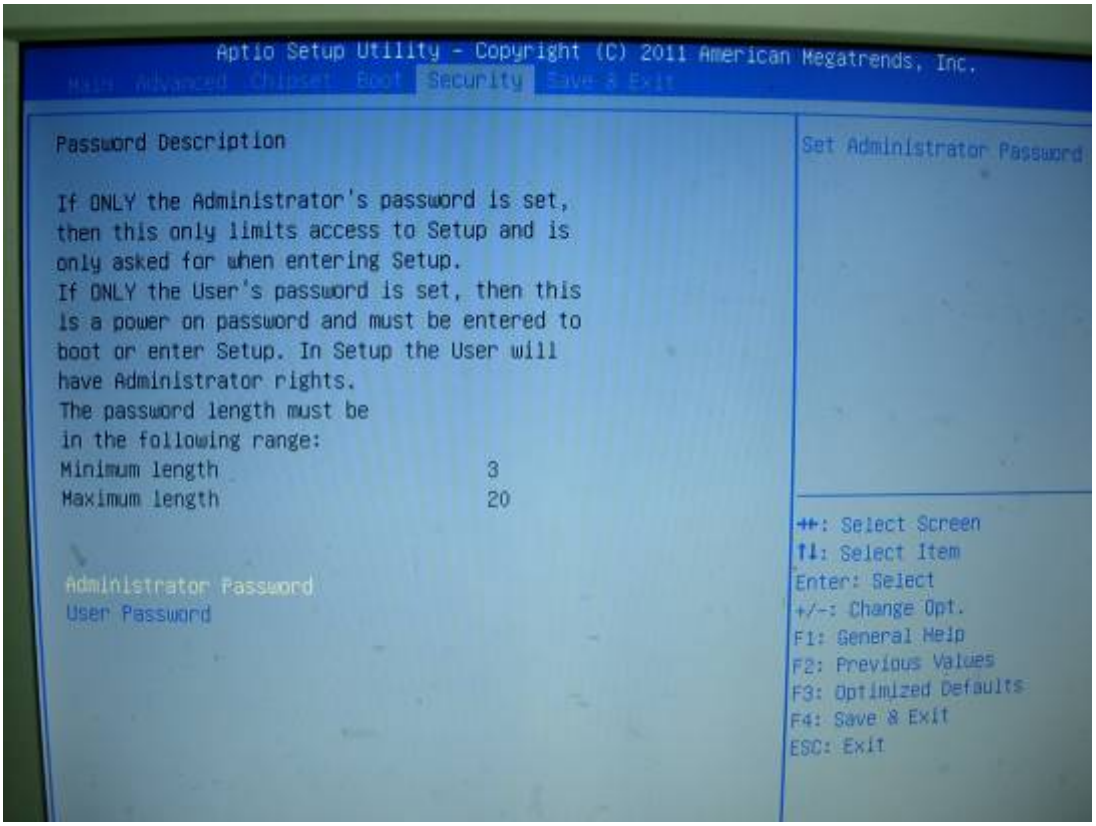
Quiet Boot [Enabled]

Use the Quiet Boot BIOS option to select the screen display when the system boots.

7 BIOS/Utility setup

7-4 Security

Use the Security menu to set system and user passwords.


Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
Security
Password Description
If ONLY the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup.
If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights.
The password length must be in the following range:
Minimum length 3
Maximum length 20
Administrator Password
User Password
Set Administrator Password
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

Administrator Password

Use the Administrator Password to set or change an administrator password.

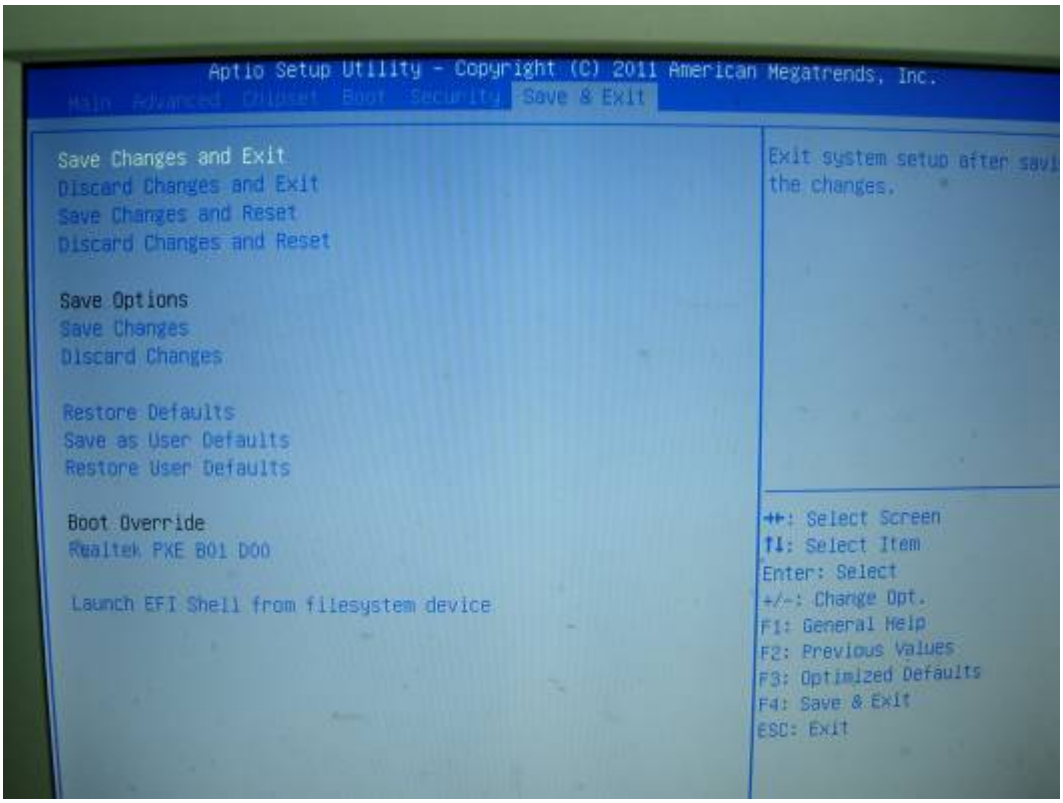
User Password

Use the User Password to set or change a user password.

7 BIOS/Utility setup

7-5 Save & Exit

Use the Save & Exit menu to load default BIOS values, optimal failsafe values and to save configuration changes.



8 LCD Surface Cleaning

1. How to clean the LCD surface properly?

- ☆ Do not spray any liquids on the LCD screen directly, and do not use paper towels, this can cause the LCD screen to become scratched.
- ☆ Always apply the solution to your cloth first, not directly to the parts you are cleaning. You want to avoid dripping the solution directly into your computer or laptop.
- ☆ Stroke the cloth across the display in one direction, moving from the top of the display to the bottom.

2. What are some of the basic supplies needed to clean an LCD screen?

- ☆ A soft cotton cloth. When cleaning the LCD screen it is important to use a soft cotton cloth, rather than an old rag. Some materials, such as paper towels, could cause scratches and damage the LCD screen.
- ☆ Solution of water and isopropyl alcohol. This solution can be used along with the soft cotton cloth.
- ☆ Computer wipes. Only use these if they specifically state on the package they are designed for LCD laptop screens. Computer wipes can come in handy for fast clean-ups or when you want to avoid mixing up a cleaning solution yourself.

3. What types of cleaners are acceptable?

- ☆ Water
- ☆ Vinegar (mixed with water)
- ☆ Isopropyl Alcohol

NOTICE: The following cleaners are unacceptable:

- ☆ Acetone
- ☆ Ethyl alcohol
- ☆ Ethyl acid
- ☆ Ammonia
- ☆ Methyl chloride